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AUTHOR Wolfe, Howard C.; And Others
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ABSTRACT

Evaluation of the Health and Science Action Learning Project was conducted as part of a larger national study of experience-based education programs in secondary schools. Developed to alleviate the problem of minority underrepresentation in the health professions, the program was designed to encourage minority students to consider these careers and increase their capacity to pursue such careers successfully. The research design involved use of instruments and data collection procedures specific to the local evaluation, as well as several instruments of the national evaluation to test the nine project objectives and program implementation. The program was found to have had a positive effect in two areas: exploration and knowledge of careers and self-esteem. There was no change in vocational maturity, confidence in social situations, vocational aspirations, attitudes toward hospitals, or motivation. Recommendations included (1) shifting the program to the morning to provide a better experience at the hospital and increase enrollment, (2) allocating more time to hospital field experience, (3) increasing effort to recruit minority and disadvantaged students with low motivation, (4) providing followup beyond the trimester program, and (5) increasing minority staffing. (Evaluation instruments are appended.) (YLB)

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FINAL REPORT OF THE EVALUATION OF

THE HEALTH AND SCIENCE ACTION LEARNING PROJECT

Central High School
Minneapolis Public Schools

Funded by a grant from the Office of Career Education (DHEW/OE), Washington, D.C.

Howard C. Wolfe, Principal Evaluator

with
Janis Arneson
&
Cathy Ingle

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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University of Minnesota
Center for Youth Development & Research
48 McNeal Hall
1985 Buford Avenue
St. Paul, Minnesota 55108

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Commentary on Evaluation of Health and Science Action Learning Project

by Diane Hedin
Project Director, National Evaluation of Experiential Education
University of Minnesota

The evaluation of the Health and Science Action Learning Project was a part of a larger national study of experience-based educational programs in secondary schools. The effects of this health careers program can better be understood in the context of the national study. The national study relied on both quantitative, paper and pencil instruments and qualitative measures (interviews, observations, and student self-reports and journals) to assess the rather elusive, but very significant, outcomes of this educational practice. Because very little research has been done on experiential programs, there was little guidance from previous work as to which evaluative approaches would be most appropriate. Therefore, multiple measures and triangulation of the data was thought to be the most reasonable strategy for discovering the program effects.

This approach proved to be very useful in this project. In general, the qualitative data were far stronger and more positive than quantitative measures. This pattern held for all of the programs in which low income, minority students were the primary clientele. It appeared that these paper and pencil tests have serious limitations for these young people, who often view them as alien symbols of irrational, arbitrary authority; devices for keeping them in their place; and reminders of past failures. Therefore, the results of this portion of the evaluation must be interpreted cautiously, with their limitations recognized and supplemented.

In general, the qualitative data -- student assessment of the program, parent and supervisor surveys, and observations of the staff -- indicated that the program was a powerfully effective educational experience. All the students reported learning much more (68.6%) or more (31.4%)in this program as compared to the average class. 51.4% of the students rated it an excellent learning experience -- with 48.6% rating it good. No students rated it poor or terrible. The hospital supervisors, in general, were positive toward the program with 25% rating the student's overall performance as excellent, 42.9% as very good and 32% as satisfactory. Not a single supervisor gave the students a poor or unsatisfactory rating. 94% of the parents thought their son or daughter had learned much more (72.2%) or more (22.8%) in this program as compared to other classes, with 5% responding they had learned less.

The quantitative data did not show the same magnitude of change, though they did show small increases on the majority of dimensions evaluated -- self-esteem, career exploration and knowledge of careers, self-confidence in social situations, attitudes toward adults and toward hospitals and vocational aspirations. In two cases, the results were statistically significant -- exploration and knowledge of careers and self-esteem.

The following evaluation conducted by Howard Wolfe relied almost exclusively on the paper and pencil test results for assessing the program effects. While the qualitative data is reported, the findings from these interviews, self-reports, journals, etc., are not taken into account in making the final conclusions.

Furthermore, in the interpretation of the data, the sole criteria for success was whether there was statistically significant change. Often pre-post tests increases were not reported because of this arbitrary use of mere statistical significance. For all these reasons, the following report should be read cautiously, keeping in mind that the paper and pencil tests alone do not appear to be an adequate and valid measure of the program's effect.

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SUMMARY: HEALTH CAREERS AND ACTION LEARNING PROJECT

This program, 1978-79, was developed to alleviate the problem of under-representation of minorities in the health professions. It was designed to encourage minority students to consider careers in the health care field and to increase their capacity to pursue such careers successfully. This Central High School program, in partnership with a major health care and training facility, the Veteran's Administration Hospital, Minneapolis, provided a combination of challenging academic and "hands on" experiences. These experiences were designed to nurture career decision making, strengthen their mastery of biology and increase their confidence in their own abilities. The project was budgeted for 90 students at a cost of $262 per student-credit. However, due to recruitment difficulties caused by the time of day the program was offered, enrollment only reached 40. Thus, the cost per pupil per credit was $669. Students received 2 science credits and one elective for the class. Enrollment was open to 10th, 11th and 12th grades and 55% of the students were minorities. Staff included a full-time director, two half-time biology teachers, a 40% time nurse-educator, and a half-time secretary.

The evaluation was conducted by the Center for Youth Development and Research at the University of Minnesota and was requested by the sponsoring agency, Office of Career Education. The design utilized extensive objective testing of ten objectives, interviews with program and hospital staff and shadowing students. A true experimental design was planned but the lack of enrollment prohibited random assignment.

The program had a positive effect in two areas: Exploration and Knowledge of Careers and in Self-Esteem. No change was found in vocational maturity, confidence in social situations, vocational aspirations, attitudes toward hospitals or motivation. The latter finding was due to students having an initially high level motivation. The program was well implemented, especially in the biology class and at the hospital. The "Alternative to the Streets" Seminar requires further development including better integration with the rest of the program, inclusion of weekly group discussions and more dynamic and realistic methods of presentation of career information.

Other recommendations include: shifting the program to the morning to provide a better experience at the hospital and to increase enrollment; allocating more time to hospital field experience; increased effort to recruit minority and disadvantaged students with low motivation; providing follow-up beyond the trimester program; and increasing minority staffing. The overall recommendation is that the program should be continued with the modifications.

I. PROGRAM OVERVIEW*

Health Careers and Science Action Learning was developed as one response to the serious problem of underrepresentation of minorities in the health professions. Specifically, this project was designed to encourage minority students to consider careers in the health care field and to increase their capacity to successfully pursue such careers. In this project, an inner-city high school, Central High School, Minneapolis, in partnership with a major health care and training facility, the Veteran's Administration Hospital, Minneapolis, provided a combination of challenging academic and "hands on" experience. These experiences were designed to strengthen their mastery of scientific content, nurture career decision-making and increase their confidence in their own abilities. An evaluation of the program has been completed and this report details the findings of that evaluation.

A. Origins of the Program

1. Evidence of need - Currently, in this country, a disproportionately small number of professional workers are minority group members.** Although affirmative action programs have been established to rectify this situation, they can help only those who are already motivated to seek higher education or employment, and who are now in the job market. Thus, these programs have failed to reach the large number of minority group members who have never been motivated in this direction, because they have never challenged the cultural assumption that high status careers are the birthright of the majority.

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* Much of the information in this chapter was found in the grant proposal and semi-annual report of the program.

** The Unfinished Business Twenty Years Later. U.S. Commission on Civil Rights, September, 1977, p. 4.

To change attitudes ingrained in our society for generations presents a serious challenge to the American educational system. Unhappily, there are no simple and quick solutions to this complex and persistent problem. One long-run solution that secondary and elementary schools might offer is the provision of such excellent and powerful educational experiences for minority students that they will be able to compete on an equal basis with majority students for satisfying and prestigious careers. Health Careers and Science Action Learning was offered as such a model.

The health care field was chosen as the focus of this project for several reasons. First, according to the 1970 census, only 2.1% of the U.S. doctors were black. This situation is problematic, not only because it is inequitable, but because racial prejudice is discouraging blacks from seeking health care and having an adverse effect on the quality of health care available to blacks.

According to HEW's Bureau of Health Manpower, fewer minority persons applied for medical school in 1975-76. This downward trend seems to be a continuing one. Second, not only are black physicians an extremely low percentage of the total population of physicians, but blacks and other minorities are underrepresented in all health care occupations and professions. Third, the phenomenal growth in the quality and variety of health care services continues to require many new workers. Minority students must be made aware of the potential for such career opportunities. This awareness, which hopefully, will result in minority youth moving into such careers may also have the effect of helping to solve the almost intractable problem of unemployment among young blacks.

While the focus of this project has been on encouraging minority youth to experiment with career opportunities in the health field, this model of a secondary school working with a professional training instituition can be used in several fields -- law, engineering, public administration, architecture and many others. It also can be transferred to other student groups underrepresented

in these professions such as low income youth and women. Thus, another major goal of the project has been to develop a model in which secondary schools in cooperation with universities, professional training institutions, and professionals in practice provide experience-based educational opportunities designed to give discriminated against groups both the motivation and the capability to pursue careers from which they have been historically excluded.

2. Utilization of Prior Work - The project built on a substantial amount of prior work in Central High School and the Minneapolis Public Schools. For the past four years, Central High has been one of the schools involved in the Action Learning Program, funded by the Danforth Foundation, one of the most comprehensive attempts to promote experiential learning in any large city school system in the country. This project gave the faculty and administration of Central a good deal of experience in offering action learning programs to secondary students in a variety of subject matter areas and at all grade levels. Through this project, Central had already established cooperative arrangements between numerous governmental, social, educational, business and industry settings so that students could learn in and from the wider community.

The Central faculty participated in Career Education Projects of the Minneapolis and St. Paul Schools during 1975-77. Seventeen members of the Central faculty received in-service training in how to incorporate career education concepts into their courses. While some were able to develop learning activities that promoted career development in their students, the teachers needed additional assistance to incorporate career development into their courses. Through this project, science teachers were able to finally implement many of the ideas and concepts they acquired through the in-service program.

A similiar response to the need for combined science and health careers education for minority adolescents has been working in the New York City Public Schools for six years. In this program, 8th and 9th graders spend one school

day per week at the New York University Medical Center. The day is divided into three parts which coincide with the three major program activities: Field placements (2 hours), student science laboratory (1½ hours), and special programs -- tours, seminars, classes (1 hour). The overall model, using the same three major activities and the pedagogical concept of coordinated field placements and science laboratory curriculum was duplicated in this project. Science laboratory exercises in anatomy, chemistry, microbiology, botany and physics were modified to suit project needs. Techniques used in locating field placements and liaison with hospital departments were similar to those used in New York. Special program components such as the "Alternatives to the Streets" series have their origins in practices done in New York.

B. Objectives of the Program

Nine overall objectives were determined for this project and were the main focus of the evaluation effort:

Learner Outcome Objectives

1. Students will be less accepting of occupational roles stereotyped by racial background.

2. Students' awareness of career opportunities will increase (by acquainting minority youth with a broad view of the world of work, not available in inner city neighborhoods, in an urban medical center).

3. Inner city students' self-concept will grow in a positive direction.

4. Inner city students' level of motivation will be increased as measured by.
   a. lowered incidence of absences and cuts
   b. raised ratio of homework completed to homework assigned
   c. positive attitude toward school

5. Students' levels of achievement in science and communication skills will rise.

6. Students' attitude toward hospitals will become more positive.

Process Objectives

7. To expose minority youth to positive role models, often absent in the inner city.

8. To produce a new educational context which infuses aspects of health related work, skills and experiences into a science curriculum.

9. To provide an opportunity for students to define more sharply career directions.

C. Characteristics of the Program

Students participated in the program five afternoons per week, from 1:00 to 3:00 p.m.. The students worked two afternoons a week in field placements at the Veterans' Administration Hospital. A choice of settings was offered and most students were given their first choice. Possible placements included nursing wards, orthopedics, dentistry, animal laboratory, occupational therapy, physical therapy, research laboratory, X-ray, and histology laboratory. Students' tasks ranged from providing companionship for patients to making braces. All of the students were assigned individual supervisors on the hospital staff, who trained them for their tasks, provided them with career information and assisted them as necessary to gain the optimum benefit from their field experience. In addition, two post-clinical group discussions were initiated winter trimester at the suggestion of the evaluator at which students shared their reactions to their placements with project staff and each other.

Two afternoons a week were spent in biology classes held at Metropolitan Community College, in a modern laboratory. The class was taught by the science teachers on the project staff and a special effort was made to integrate the classroom experience with the field experience. For example, while studying neurology, a student who worked in brain research described his activities and the nursing student on the neurology ward described the effects of chronic alcoholism on the nervous systems.

One afternoon a week, called "Alternatives to the Streets Seminar," was spent in special activities, such as field trips to health care facilities, seminars, films and gust speakers. The focus of most of these activities was to explore opportunities and develop career decision-making skills for minority youth. For example, members of the National Student Medical Association (a minority organization) provided individual counseling for the students. In the classroom and on field trips to facilities staffed largely by minorities, students heard minority health professionals discuss their work. Additional guidance

was offered by Project Breakthrough to Health Careers, a minority recruitment program associated with Metropolitan Community College and the Minneapolis Area Technical Vocational Institute. Project staff also held formal and informal career counseling sessions and the Career Skills Assessment Program was implemented.

Many of the students were involved in voluntary projects, in addition to required activities, which served the school and community, such as hypertension screening, blood typing and sickle cell screening, and smoking research and education.

D. Students

40 students participated in the program during the school year; 13 during the fall trimester, 13 during the winter trimester, and 14 during the spring trimester. 55% (N=22) of these students were minority students. 9 were male and 31 were female. 19 were sophomores; 15 were juniors; and 6 were seniors.

Statistical tests were conducted on the three trimester classes to determine if they were similar enough to be combined into one group. The following variables were examined: socioeconomic status, age, grade, minority group status, sex, number of extra curricular activities, occupational plans, grade point average, and on pre-test scores of Janis-Field self-esteem, general self-esteem and the Crites Vocational Maturity Scale. None of these was statistically significant, indicating that the three classes were initially similar enough to be combined.

Enrollment size was approximately half that which was anticipated. Project staff, school staff, student participants and the evaluator analyzed this situation during the first trimester. It was discovered that the low enrollment was due to scheduling conflicts particularly with band and chorus; but also work study, sports, exchange programs with VoTech and other high schools. Lack of student and faculty acceptance of a new and untried program was a lesser factor.

Recruitment efforts were then increased and these included P.A. announcements, newspaper articles, distribution of flyers and posters, and presentations to the faculty and their subsequent announcements in class and encouragement of individual students. In addition, various activities which increased program visibility generated interest in and awareness of the program. Specific activities involved school outreach: sickle cell and hypertension screening, blood typing, educationals during open house and homecoming, maintenance of a bulletin board, and the provision of a Health Careers Resource Center for all students. As a result of these efforts, pre-registration almost doubled for the winter trimester, but the actual enrollment did not increase, because scheduling conflicts again prohibited students from participating in the program.

E. Faculty and Staff

Project staff included a full-time Program Coordinator, a full-time science teacher a part-time nurse educator, and a part-time secretary. In addition, the school principal, Dr. Joyce Jackson, served as an advisor to the project on a part-time basis. Program Coordinator was Arthur B. Serotoff. He was responsible for: (A) administrative tasks--student recruitment, writing reports, making arrangements for field trips and speakers, ordering materials, public relations, developing a career resource library, and serving as liaison between the program and the Veterans' Administration Hospital; and (B) direct student assistance -- evaluating student reports, providing support and personal/vocational counseling serving as liaison between students and preceptors, assisting students with job placements and plans to further their education, and helping students to process information and to take full advantage of their field experience. Two biology teachers, Linda Laine and Don Jackson, shared the full time position of science teacher. Ms. Laine taught the Biology Lab fall and spring, and Mr. Jackson taught it winter trimester. They were responsible for directing the laboratory portion of the program, with special emphasis on preparing a science curriculum

which was directly related to the students' field experience. In addition, they served as program liaison in the school. Nurse-educator, Jo Langevin, directed the nursing component of the program: developing a curriculum, training students in patient care, serving as liaison with the hospital nursing department. The nurse-educator, the biology teacher and the program coordinator each supervised one-third of the students at the hospital.

II. OVERVIEW OF EVALUATION DESIGN

A. Evaluation Design

This evaluation was primarily summative in nature; its purpose was to measure the effectiveness of Health Careers and Science Action Learning in meeting its nine program objectives and to evaluate program implementation. The evaluation was conducted in conjunction with the National Evaluation of Experiential Education programs conducted by the Center for Youth Development and Research, University of Minnesota, which was funded by the Rockefeller Family Fund and the Spencer Foundation, and sponsored by the Commission on Educational Issues (an affiliate of the National Association of Independent Schools), The National Association of Secondary School Principals, The National Catholic Education Association, and The National Association of Independant Schools. This national project evaluated 30 experiential learning programs in 20 independent, public and parochial schools around the country. Approximately 4,000 students participated in the Action Learning programs, which can be defined as "educational programs offered as an integral part of the general school curriculum, but taking place outside of the conventional classroom, where students are in new roles featuring significant tasks with real consequences, and where the emphasis is on learning by doing with associated reflection."* In addition to the type of program which focuses on career exploration, such as the Health Careers and Science Action Learning, other programs included in the national study featured volunteer service, political and social action, outdoor adventure, internships in business and government, and research in the community. With the assistance of the evaluators, a "Panel of Practitioners" that included educators from around the country, as well as the director of this program, defined the issues to be studied, helped select and develop instruments of measurement, and assisted in the interpretation of the data.

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* "The Evaluation of Experiential Learning Project: Preliminary Findings," Diane Hedin and Dan Conrad, Center for Youth Development and Research, University of Minnesota, April, 1979, pp. 1-2.

Involvement with the national evaluation enabled this evaluator to conduct a more extensive evaluation than the allocation under the program grant would normally have permitted. Some of the instruments were developed as part of the national evaluation, while others were developed specifically for this evaluation. In exchange, the evaluator was given permission to use the data as part of the national study.

The research design was to be a standard experimental design, using random assignment to control and treatment groups. Deviations from this design, which were necessitated by changes in program implementation, will be discussed following an overview of the original design. At the beginning of the school year, a pool of participants were to be obtained through a recruitment procedure. From this pool, students were to be randomly assigned to one of the three trimesters. The pretest of the winter group was to serve as the control comparison for the winter group. This combination of random assignment and control groups was planned to provide a strong, vigorous design which would control for alternative explanations of the findings. This design is represented on the next page.

The analysis of this data was to involve several procedures:

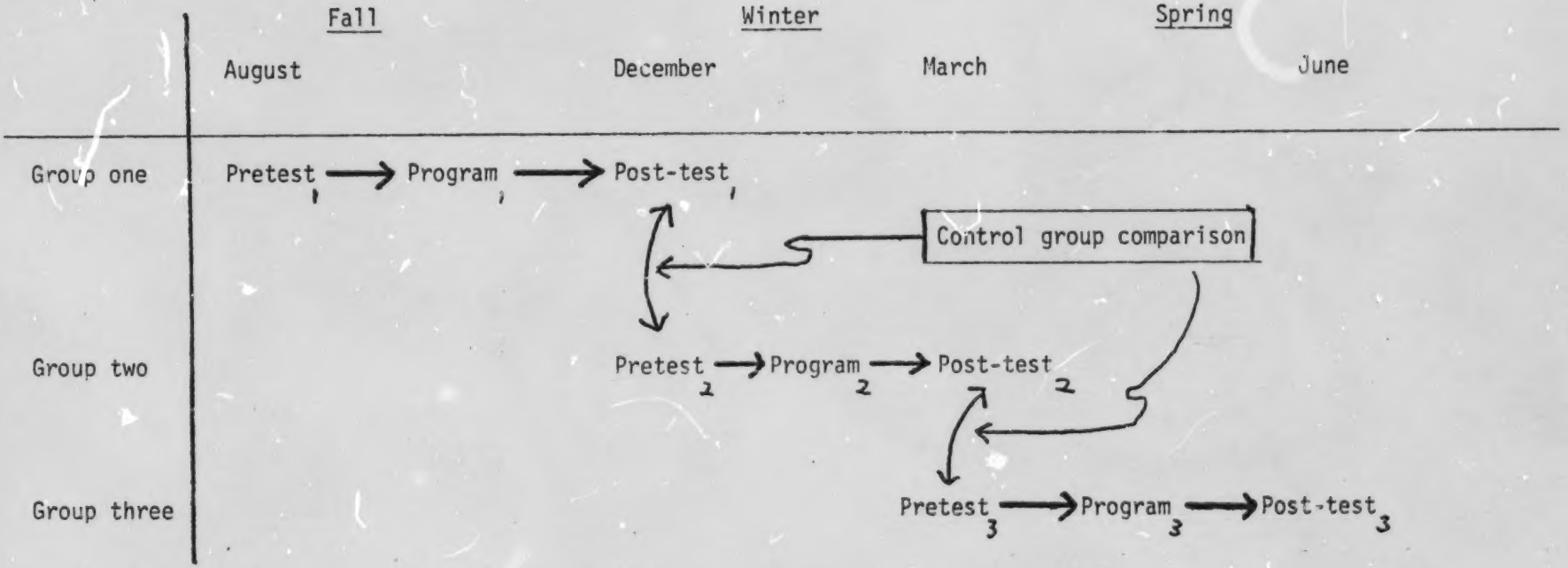
(a) A "Post-test (Group 1) vs. Pretest (Group 2)" and a "Post-test (Group 2) vs. Pretest (Group 3)" comparison was to be used to test for the effects of maturation and alternative experiences during the program (history). This is the control group comparison.

(b) Pretests of all three groups were to be compared to determine if the groups were initially equivalent.

(c) Gain scores were to be computed on all measures. Pretests were to serve as the base line and tests of significants were to be computed.

(d) A regression model was to be developed to account for the outcomes using predictor variables. This statistical procedure would determine what features of the program and characteristics of the participants had the greatest "real" impact on the outcomes and how large the impact was.

RESEARCH DESIGN



In addition, site visits were to be conducted and students and staff were to be interviewed to evaluate program implementation.

Modification of this design became necessary because fewer students participated in the program than had been anticipated. Thus, the pool of students recruited at the beginning of the school year was not large enough to fill even the fall trimester of the program, and recruitment procedures had to be renewed each trimester. Due to this change in program implementation, random assignment of students and the use of control groups was impossible. Instead, comparison groups from other schools in the national study were used in place of control groups within this program. Also, interviews with school counselors, program staff and participants were undertaken to determine the cause of the recruitment problem.

B. Outcome Measures

In order to assess the effectiveness of this program in achieving its objectives, several instruments of the national evaluation are being used in addition to the instruments and data collection procedure specific to the local evaluation. The following chart lists the program objectives, summarizes the evaluation methods used to determine to what extent they were achieved, and indicates whether the methods were borrowed from the national evaluation or used only for the local evaluation. Further detail on the individual instruments is found in Part III.

Objective One: "Students will be less accepting of low status occupational roles."

Variable	Method of Measurement
Occupational Aspirations	"Jobs possible for me to fill" questionnaire* (An open-ended listing of jobs that would be possible for them to fill.)

* Used only for the Central High School Evaluation.

Variable	Method of Measurement
Occupational Aspirations (continued)	"Jobs I know in the health field" questionnaire** (An open-ended listing of jobs that students are aware of in the health field.) Job titles were rated according to their Socio-Economic Status (SES) using the Bureau of Census Scale. The score for each student was the average SES score for the occupations listed on each questionnaire.
Objective Two:	"Student's awareness of career opportunities will increase."
Variable	Method of Measurement
Knowledge of job titles	This was measured through a count of the job titles listed in the above two questionnaires.
Objective Three:	"Inner city students' self-concept will grow in a positive direction."
Variable	Method of Measurement
a) General Self-Esteem	"Rosenberg Self-Esteem Test."** A general measure of self-esteem. Part of Pre-Post Questionnaire.
b) Self-Esteem in Social Situations	"Janis-Field Self-Esteem Test."** Measures feelings of self-worth and confidence in social situations. Part of Pre-Post Questionnaire.
Objective Four:	"Inner city students' level of motivation will be increased."
Variable	Method of Measurement
a) School Attendance	Documentary evidence collected by program director and staff was compared with previous year's attendance.*
b) Program Cuts	Documentary evidence collected by program director and staff.*
c) Rate of Assignments Completed	Rate = $\frac{\text{No. of assignments completed}}{\text{total no. of assignments}}$ for 1st and last 3rd trimester. Documentary evidence collected by staff.*
d) Amount of Volunteerism	Number of times students volunteer for non-mandatory parts of programs. Documentary evidence collected by staff.*
e) Social and Personal Responsibility	"Social and Personal Responsibility Scale."** Measures motivation to act in socially and personally responsible ways. Part of Pre-Post Questionnaire.

** Used for the National Evaluation and the Central High School Evaluation.
* Used only for the Central High School Evaluation

Objective Five:	"Student's level of achievement in science and communication skills will rise."
Variable	Method of Measurement
Writing Proficiency	Samples of required written reports were rated by trained raters for: a) grammatical errors b) style* Raters were "blind" with respect to Pre vs. Post-test and identity of author. Pretest samples were from the 1st third of each trimester; the post-test from the last third of each trimester.
Science Achievement	Lab Reports and classroom tests of content and technique developed by the science teacher. 80% was the criteria for success.
Objective Six:	"Student's attitude toward hospitals will become more positive."
Variable	Method of Measurement
Attitude Toward Hospitals	"Your opinion about hospitals" Semantic Differential Format.*
Objective Seven:	"To expose minority youth to positive role models, often absent in the inner city."
Variable	Method of Measurement
Proportion of Minority Preceptors	Documentary evidence - collected by staff.*
Hours of Pupil Contact	Documentary evidence - collected by staff.*
Objective Eight	"To produce a new educational context which infuses aspects of related work, skills and experiences into a science curriculum." The following data will be used to document the innovative aspects of the program:* a) Curriculum reports from this program will be compared with traditional curriculum b) Observational data c) Anecdotal data The data will be collected by the Staff and the Evaluator.

* Used only for the Central High School Evaluation.
** Used for the National Evaluation and the Central High School Evaluation.

Objective Nine:	"To provide an opportunity for students to define more sharply career directions."
Variable	Method of Measurement
Career	"Career Exploration Inventory"** measures activity directed toward exploring career options, content and suitability.
Vocational Maturity	"Crites Vocational Maturity Test." Measures attitudes toward a career decision and stage of career decision-making process.

C. Implementation Measures

Student participants and Project Staff were questioned to obtain their subjective evaluation of how the program was implemented. A questionnaire was developed to obtain the students' evaluations of the various aspects of the program. It covered the following areas:

(a) Field Placements

(b) Science Laboratory

(c) "Alternatives to the Street" seminar

(d) Staff

The Staff (Project Director, Nurse and both Science teachers) were interviewed in semi-structured formal interviews for which an interview protocol was developed. Thirty-seven hours of interviewing were conducted. In addition, preceptors evaluated their experiences with the students through a self-administered questionnaire. Further information regarding program implementation was obtained through twenty-one site visits throughout the year by two evaluators.

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* Used only for the Central High School Evaluation.
** Used for the National Evaluation and the Central High School Evaluation.

III. Measurement and Data Collection Procedures*

This section describes in detail the measurement instruments and data collection methods used in this evaluation. The outcome measures, grouped according to the objectives they were used to measure, are discussed first, followed by a discussion of the implementation measures. Copies of all questionnaires can be found in the Appendix.

A. Outcome Measures

Objective One: "Students will be less accepting of low status occupational roles."

Objective Two: "Students' awareness of career opportunities will increase."

Two instruments were administered at the beginning and conclusion of each trimester to determine the extent to which students' career aspirations and their awareness of career opportunities had increased: the "Jobs Possible for Me to Fill" questionnaire and the "Jobs I Know in the Health Field" questionnaire. Both questionnaires required an open-ended listing of jobs. The data obtained by these instruments were analyzed in two ways.

In order to discover the extent to which a student's career aspirations had risen, the jobs listed were rated according to their socioeconomic status (SES), using the scale developed by the Bureau of the Census.** The student's score was the average (SES) of the occupations listed. The Census Bureau scale was chosen from the available occupational status measures because it is based on objective measures of social status. These scores are the average of the percentile ratings for income and educational ranking in the population. The

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*Portions of this chapter were adapted from Dan Conrad's forthcoming Ph.D. Dissertation, University of Minnesota

**Measures of Occupational Attitudes and Occupational Characteristics. John P. Robinson, Robert Athanasion, and Kendra B. Head, Institute for Social Research, University of Michigan, Ann Arbor, MI, 1969, pp 335-356.

computation of an individual's total score depends on his average percentile rating for income and education. Other frequently used scales, such as the Duncan SES Scale, were rejected because of the subjective component in which a sampling of the population was asked to rank various occupations according to prestige.

To ascertain the extent to which a student's awareness of career opportunities had increased, the number of jobs listed in response to each questionnaire were counted and the pre and post-test totals compared.

Objective Three: "Inner city students' self-concept will grow in a positive direction."

Two instruments were borrowed from the national evaluation to measure the effect of the program on students' self-esteem: the "Rosenberg Self Esteem Scale" and the "Janis-Field Feelings of Inadequacy Scale."

The Rosenberg Self Esteem Scale measures the self acceptance aspect of self esteem. Originally developed for use with high school students, it was designed specifically with brevity and ease of administration in mind. The scale consists of ten items answered on a four point scale from strongly agree to strongly disagree.

The scale has been widely applied by researchers desiring a brief scale applicable to many ages (Robinson & Shaver, 1973). Silber and Tippet (1965) found that the scale correlated from .56 to .83 with several similar measures and clinical assessments. The same authors also found a test-retest correlation over two weeks of .85 (N = 28).

Janis-Field Feelings of Inadequacy Scale. This scale was originally designed to measure feelings of inadequacy in studies relating to a person's persuasibility. Like the Rosenberg Scale, it is brief, has been used extensively in research, and has achieved wide acceptance as a measure of

self esteem (Robinson & Shaver, 1973). It differs from the Rosenberg and similar measures by its focus on self esteem in actual social situations rather than on more generalized feelings about the self. The difference can readily be seen by comparing items from the two scales. A typical Rosenberg item reads "On the whole, I am satisfied with myself," as contrasted to the typically more situation-specific and socially-oriented items of the Janis-Field Scale such as "When you speak in a class discussion, how often do you feel sure of yourself?"

The scale has held up reasonably well through tests of reliability and validity as reported by Robinson and Shaver (1973). Split-half reliabilities range from .72 to .88, and hold at these levels for even revised and shortened versions of the scale. For example, a ten-item version of the scale attained a split-half reliability of .80 (Taylor and Rietz, 1968). Robinson and Shaver further report correlations of .67 with the California Psychological Inventory, .60 with self-ratings of esteem, and only .35 with the Marlowe-Crowe Social Desirability Scale.

As indicated above, the Janis-Field Scale is not only widely used, but is commonly used as a basis for study-specific scales or used in a shortened version. For this study, a ten-item scale was used. The items chosen were the 10 with the highest interitem correlation from the 20-item scale (Skolnick and Shaw, 1970). Each of these items represent situations which are common to high school students and which could reasonably be expected to be encountered in a community-based experiential program.

Objective Four: "Inner city students' level of motivation will be increased."

The students' level of motivation was evaluated by examining their attendance in school and in the program, the rate of assignments completed, and the amount of volunteerism. Documentary evidence of these behaviors was collected by the program director and the staff. The evaluator compared data from the

beginning and end of each trimester, as well as comparing data from this program with data collected previous to the program. In addition, an instrument from the national evaluation, the "Social and Personal Responsibility Scale", was used to measure students' motivation to act in socially and personally responsible ways.

Personal and Social Responsibility Scale. This scale was developed specifically for the national evaluation, because no instruments were found which adequately measure growth in personal and social responsibility. The instrument most commonly used to measure these attitudes is the Social Responsibility Scale (SRS) by Berkowitz and Daniels (1964), which was based on work by Dale Harris (1957). Although SRS has been widely used in research, it was considered inappropriate on these counts: 1) its tendency, even intent, to elicit what the subjects consider to be socially desirable responses (Stone, 1965; Berkowitz, 1965); 2) its focus on attitudes only; and 3) its heavy emphasis on general social referrents of responsibility.

A new responsibility scale was created for the national study and named the Personal and Social Responsibility Scale (PSRS).* While a few items on general social responsibility could be adapted from the aforementioned scales, it was necessary to alter the format of the questionnaire and to develop completely new items for other critical dimensions of responsibility. The intent was to create a scale that would be more encompassing and, at the same time, be related more directly to the experiences of students in community-based educational programs. What evolved was a scale which centered on two critical dimensions of responsibility: its objects (or domains) and its attributes. Each of these was further divided as discussed below.

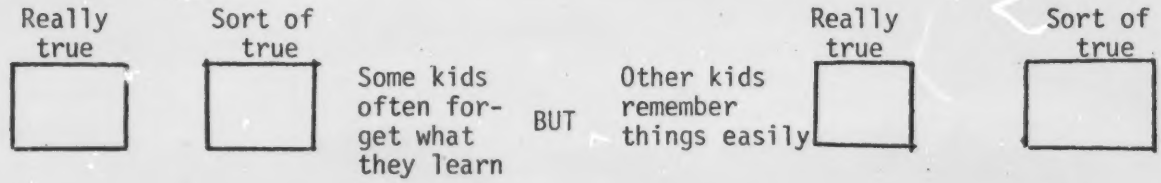
*The PSRS was developed jointly by Dan Conrad and by Dr. Diane Hedin of the University of Minnesota.

The domains of responsibility included in the scale are those relating to 1) personal and role accountability; 2) sense of obligation to a group; and 3) felt commitment to the welfare of the larger community or society. These subareas are labeled as Personal, Group, and Social Responsibility. Examples of scale items which related to these three domains are: 1) "Some teenagers feel bad when they let people down who depend on them--but--other teenagers don't let it bother them that much" (Personal); 2) "Some teenagers let others do most of the work in a group--but--other teenagers help in a group all they can (Group); "Some teenagers are interested in doing something about problems in the community--but--other teenagers are not that interested in working on problems in the community."

In addition to the objects of responsibility, the scale also looks at the person who is, or is not, acting responsibly. A person may try to avoid responsibility in various ways. He may deny any obligation to act, such as in "it's none of my business." Alternatively, he may deny his competence to act such as in justifying not helping a drowning person by arguing "I'm not a good enough swimmer" or "It wouldn't do any good anyway." Thirdly, a person may believe he should and could do something, but still fail to do so. In accord with this, the PSRS aims at assessing the degree to which students feel they ought to act responsibly, feel able to do so, and the degree to which they believe they do act in a responsible manner. An example of an item that taps attitudes about responsibility is: "Some teenagers don't think it makes much sense to help others unless you get paid for it--but--other teenagers think you should help others even if you don't get paid for it." The sense that one is able to be responsible includes the notions that one is competent to act and that if one does, it may make a difference. These two elements of the competence

subscale are illustrated by these items: "Some teenagers are good at helping people--but--other teenagers don't see helping others as one of their strong points," and "Some teenagers think they are able to help solve problems in the community--but--other teenagers don't think they can do anything about them because a few powerful people decide everything." An item that taps a student's perceived effort or performance is: "Some teenagers seem to find time to work on other people's problems--but--other teenagers find taking care of their own problems more than enough to do."

A major problem in measuring responsibility is the susceptibility to socially desirable response sets, i.e., a person tends to present themselves in a positive light, giving their idealized sense of responsibility, rather than their actual level. Berkowitz (1965) acknowledged this tendency of his own scale and has accepted it: "I would have been surprised and disappointed if the Social Responsibility Scale (SRS)...had not been related to the various social desirability measures...The SRS assesses a readiness to do what is socially desirable, including the giving of socially desirable responses to opinion statements." This, however, appears to bea problem that attenuates both the validity and the utility of such scales. One way of attacking the problem is through question format. Harter (1978) has devised a "structured alternative format" in which the respondent is presented with the following type of question:



The student is first asked to decide which kid is most like him or her and then asked whether this is only sort of true or really true for him or her. As

Harter states: "The effectiveness of this question format lies in the implication that half of the kids in the world (or in one's reference group) view themselves in one way, whereas the other half view themselves in the opposite manner. That is, this type of question legitimizes either choice. Confidence in this format is bolstered by the fact that the children's verbal elaborations on he reasons for their choices indicate that they are giving accurate self-perceptions rather than socially desirable responses" (Harter, 1979). For all these reasons, this type of question format seemed ideally suited for the Personal and Social Responsibility Scale and was adapted slightly for its use in this study. Rather than use the terms "really true" or "sort of true" as Harter did, "almost always true for me" and "sometimes true for me" were used.

Because the scale was created in the last year, it has not undergone thorough analysis regarding its validity and reliability. Some tests were done before it was used, however, and others were performed as part of the overall research effort of the national study. Its construct validity was strengthened by several factors: its objective scoring system; random reversal of items to eliminate response bias; standardized administration procedures; the format is clear and readable as established by extensive pretesting of the scale and empirical investigation of reading level (grade 7/8 on the Dale-Chall Reading Level Test and grade 7 on the Fry test). In addition, several items were adapted from the standardized Berkowitz SRS, and these and others were examined by other researchers including Drs. Harter and Connell of the University of Denver who have been working on means to assess responsibility in elementary school children. Finally, five independent judges agreed (.92) on the category placement of the 24 items on the scale. Tests for concurrent validity were designed as part of the study itself including establishing correlations

between the PSRS and teacher/supervisor ratings on student responsibility. Reliability for the test as a whole was checked through the use of Cochran's Q and a reliability of .83 was attained.

Objective Five: "Students' level of achievement in science and communication skills will rise."

In order to determine student achievement in science, classroom tests of content and technique were developed and administered by the science teacher. An overall average score of 80% or higher on these tests was chosen as the criterion for success in this evaluation. Student achievement in communication was determined through the evaluation of writing assignments. As a part of the program students had writing assignments every week. These included a Biology Lab report and a journal-type report on their field experiences and special activities. A sample of these was to be collected by the program director; those collected during the first third of the trimester being the pretest, and those collected during the last third of the trimester, the post test. However, the evaluator received complete writing samples from only twenty students (50%). Thus, the results from these measures should be used with the caution that the results may not be representative, because the sample may be biased.

Two raters independently evaluated the writing samples for mechanical accuracy and style. Both raters had degrees in English; one was a high school teacher and the other an editor. The raters were "blind" as to the identity of the students and whether they were rating pre-tests or post-test samples. After experimenting with the Writing Sample Rating Scales* to score a small sample of the essays, the raters found that there was low reliability between them. Examination of the disagreement revealed that the raters had each been interpreting

*These scales were originally developed by the Far West Laboratory for Educational Research and Development, Seattle, Washington.

the scale differently. A more precise definition of the ratings was determined and another scale was added, which resulted in an acceptable level of reliability between the raters.

Scale 1. In order to rate the student's understanding of writing mechanics, the first score assigned to each sample was simply a count of the mechanical errors in the composition. Four categories of errors were used: capitalization, punctuation, spelling and grammer (including sentence fragments and run-on sentences). Interrater reliability was .921.

Scale 2. Because the degree to which different types of mechanical errors interfere with communication varies, a second score was assigned as the rater's estimation of the student's writing ability. The scale used ranged from a Rating 6 (Excellent) to Rating 1 (Poor). Rating standards were:

Rating 6: Virtually flawless writing that would be considered distinguished for a high school student. The student does not need any particular help to improve his writing skills.

Rating 5: Few errors requiring help, but the style is simplistic (repetitive sentence structure, limited vocabulary, few compound sentences, etc.)

Rating 4: A number of mechanical errors, which may result from carelessness more than a lack of skills. These errors do not seriously interfere with the reader's comprehension; however, the student could profit from having his/her errors pointed out. A student who made minor errors in punctuation, capitalization, spelling or grammar would receive this rating.

Rating 3: The frequency and severity of the errors begin to interfere with comprehension. Errors may include poor sentence structure or run-on sentences and serious grammatical errors, as well as increased frequency of capitalization, punctuation and/or spelling errors. The student needs additional classroom instruction in composition.

Rating 2: The errors indicate that the student has not learned a major aspect of composition. Sentence fragments may be prevalent in the student's writing. The student needs specialized help, possibly through small-group instruction.

Rating 1: Comprehension is nearly impossible. Several major aspects of composition have not been learned by the student. A completely individualized approach to remediation is necessary.

Interrater reliability was .815.

A third score was a subjective rating of the writer's ability to communicate in a compositional format. This scale ranged from Rating 4 (Excellent) to Rating 1 (Poor). In assigning this score, raters examined paragraphing, organization, and the logical flow of ideas in the composition. Rating definitions were:

Rating 4: Sequentially stated ideas have a relation to each other; if there is a shift from one topic to another, there is a transition between topics. Correct paragraphing is used.

Rating 3: Organization within paragraphs is good, but the composition is disjointed on a whole; there is little attempt to use transitions and topics do not always have a clear relation to each other.

Rating 2: Improper paragraphing; organization within paragraphs is confused. The composition wanders.

Rating 1: No attempt at essay format; lists are used rather than sentences; or the writing is merely a collection of brief answers to the questions raised in the assignment.

Interrater reliability was .813.

Objective Six: "Students' attitudes toward hospitals will become more positive."

The semantic differential format used in the national evaluation was chosen to determine the degree to which this objective was met.

The semantic differential is a method of observing and measuring the psychological meaning of concepts. It is highly regarded as a tool for measuring people's attitudes toward an object of concept, and is particularly useful in situations where people are likely to have emotional reactions to a topic but not well thought out opinions (Henerson, et al, 1978). The scale consists of a series of adjectives and their antonyms listed on opposite sides of the page with seven attitude positions in between. At the top of the page, the attitude object is named as the heading. The attitude object may be stated as a word, a phrase, or even a picture. For example:

Hospital

bad	____	____	____	____	____	____	____ good
beautiful	____	____	____	____	____	____	____ ugly
friendly	____	____	____	____	____	____	____ unfriendly

Charles Osgood (1957), the originator of the scale, found that the adjective pairs fall into clusters (or factors) of meaning. The most commonly used clusters are evaluative (e.g., good - bad), potency (e.g., strong - weak), and activity (e.g., fast - slow), though it is possible to use only one cluster or even more than these three. A person's or group's score is usually reported as an average or mean for each of the clusters employed.

In a review of the semantic differential technique, Kerlinger (1973) concluded that it "can be applied to a variety of research problems. It has been shown to be sufficiently reliable and valid for many research problems. It is also flexible and relatively easy to adapt to varying research demands..." (p. 579). He went on to describe it as a useful and sensitive tool for studies of attitude change.

Objective Seven: "To expose minority youth to positive role models, often absent in the inner city."

Documentary evidence was collected by the staff regarding the proportion of minority preceptors in the program and the number of hours spent in pupil contact, in order to discover to what extent this objective was met.

Objective Eight: "To produce a new educational context which infuses aspects of related work, skills, and experiences into a science curriculum."

In order to document the innovative aspects of this program, curriculum reports from this program were compared with traditional curriculum; observational and anecdotal were collected by the staff and the evaluator.

Objective Nine: "To provide an opportunity for students to define more sharply career directions."

Two instruments were used to determine to what extent the program affected students' career exploration and vocational maturity: the "Career Exploration Inventory: used in the national evaluation and the "Crites Vocational Maturity Test."

The Career Exploration Scale was adapted from the Student Attitude Questionnaire developed by the Educational Work Program of the Northwest Regional Laboratory (NWRL), Portland, Oregon (NWRL, 1978). Sixteen items were selected from this 25-item scale which was developed as a tool for evaluating Experience-Based Career Education Programs. Rather than emphasizing self-reports about attitudes toward careers and work, this questionnaire focusses on actual behaviors aimed at planning and exploring careers. It asks students to report "how frequently" in the past 12 months they have done such things as: "tried out activities related to the job or career field," or "thought about how well the job or career field matches your interests and abilities." The questionnaire was viewed as a more rigorous and appropriate assessment of the relation between experiential programs and career development than more traditional measures.

The original authors seem to have relied on rational judgment for the validity of the items and, as far as is known, no item analyses have been done by the NWRL group. However, as the items are simple and straightforward descriptions of career-related behaviors, and the respondent is merely asked how often he/she has engaged in them, this was not viewed as a serious deficiency. In a personal communication with the authors, it was reported that a split-half reliability test showed a correlation level of $\underline{r} = .93$.

The responses to the Scale are most conveniently reported as a single score calculated by assigning the possible responses ("never" through "more than once a month") numbers 1 through 5.

The "Crites Vocational Maturity Test" is a 50-item scale which measures readiness to make a vocational choice. Rather than conceiving of vocational choice as a decision which is "a historical, instantaneous, and nondynamic" it sees it as a developmental process. The test was constructed to produce a continuous score which monotonically indicates increases in readiness to make career choice. Test-retest reliability for one year is .71. (Crites, 1963).

Questionnaires

In addition to the test instruments described above, further data was collected through a variety of questionnaires.

Demographic data was collected on each student including age, grade in school, their report of their grade point average, parents' education and occupation, and each student's own career aspiration.

Parent and field supervisor surveys were administered to all parents and supervisors of students in the HC and SAL program. The parent survey consisted of the original list of 24 outcomes suggested by the program directors. Parent responses were tabulated as an indication of their perspective of program effect. The field supervisors were asked to rate student performance at the hospital according to a number of criteria including dependability, ability to work with others, self-understanding, curiosity, problem-solving ability, and overall performance.

Factors of experience.* Each respondent was asked to rate his or her own field experience on a four point scale from excellent to terrible, and to explain the rating. They were then presented with a list of features of community experiences and asked how often each was a feature of their own experience. Some of the items were stated positively ("made important decisions") and some negatively ("I never got help when I needed it").

*The scale was adapted from one developed by Owens and Owen (1978).

IV. Results

The presentation of the evaluation results will be divided into three sections:

A. A discussion of the data that relates to the ten program objectives;

B. A discussion of the quality of program implementation; and

C. A discussion of subjective data.

A. Program Objectives

Objective One: "Students will be less accepting of low status occupational roles."

This was measured on the "Jobs Possible For Me To Fill" Questionnaire and the "Jobs I Know in the Health Field" Questionnaire. Neither test showed a significant increase in the SES of the occupations listed:

Socio economic status of jobs listed on "Jobs Possible Questionnaire"

	$\bar{X}$	N	t	2-tailed probability
pre-test	70.17	29	.38	.71
post-test	71.00			

Socio economic status of jobs listed on "Jobs I Know in the Health Field"

	$\bar{X}$	N	t	2-tailed probability
pre-test	82.33	27	.35	.73
	83.04			

Looking over the raw data, the hypothesis was generated that the lack of change in aspirations was due to initially high aspirations which could not be raised during program. Two tests were conducted to verify this. First the SES of the jobs they listed in the "Jobs Possible Questionnaire" was compared with the SES of their family of origin:

	$\bar{X}$	N	T	2-tailed probability
SESof "Jobs Possible"	69.14	29	2.53	.017
SES of Family of origin	57.10			

This showed that the student's aspirations were significantly higher than the occupational attainment of their family of origin.

Second, their pre-test aspirations were compared to that of the comparison group:

	Comparison group	Treatment group	Totals
non professional aspirations	58.6% (17)	29.0% (9)	43.3% (26)
professional aspirations	41.4% (12)	71.0% (22)	56.7% (34)
Totals	100% (29)	100% (31)	100% (60)

$Chi^2 = 5.34$ D.F. = 1 $P < .05$

This showed that the treatment group had initially higher career aspirations than the comparison group (significant at the .05 level.) From this one concludes that the treatment group had initially high levels of career aspiration that was not -- and probably could not and need not -- be affected by the program.

Objective Two: "Students awareness of career opportunities will increase."

This was measured through a count of the number of job titles that students listed on the questionnaires:

Number of Jobs Possible For Me To Fill

	$\bar{X}$	N	T	2-tailed probability
pre-test	7.41	29	1.71	.099
post-test	9.83			

Number of Jobs I Know in The Health Field

	$\bar{X}$	N	T	2-tailed probability
pre-test	6.58	26	4.15	.001
post-test	12.70			

In terms of general jobs, students could name a significantly greater number; however, in the health field they were able to name almost twice as many job titles. This was significant at the .001 level.

Objective Three: "Inner city student's self-concept will grow in a positive direction."

A t-test was performed on the pre-post scores of the Rosenberg Self-Esteem Scale:

	$\bar{X}$	N	T	2-tailed probability
pre-test	30.06	35	2.13	P .05
post-test	31.62			

This shows that there was a significant increase in self-esteem. Next this gain was compared to the comparison group using Analysis of Covariance. Post-test self-esteem was used as the dependent variable with pre-test self-esteem as the covariate and treatment vs. comparison as the independent variable.

Analysis of Variance

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif. of F
Covariate (Pre-test self-esteem)	102.464	1	102.464	8.144	.006
Main Effects of Treatment on self-esteem)	65.158	1	65.158	5.179	.026
Explained	203.064	2	101.532	8,080	.001
Residual	805.178	64	12.581		
Total	1 008.242	66	15.276		

76 cases were processed.
9 cases (11.8 %) were missing.

This analysis shows that the main effects of the program were significant at the .026 level when the pre-test is used as a covariate. Thus the program was able to increase self-esteem and do it more than the comparison. About 20% (R^2) of the post-test self-esteem variance is attributable to the program effects. This is especially impressive since the comparison group was also involved in an action learning experience.

A t-test was performed on the pre-post scores of the Janis Field Self-Esteem Scale:

	$\bar{X}$	N	T	2-tailed probability
pre-test	31.39	31	.93	.36
post-test	32.10			

This showed that the difference was non-significant. An analysis of covariance was performed which was not significant.

Analysis of Variance

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif. of F
Covariate (Pre-test: Janis Field Self-Esteem)	285.358	1	285.358	11.599	.001
Main Effects (Treatment vs. Comparison Group)	59.918	1	59.918	2.436	.124
Explained	411.886	2	205.943	8.371	.001
Residual	1459.909	63	24.602		
Total	1961.795	65	30.181		

76 cases were processed.
10 cases (13.2%) were missing.

Objective Four: "Inner city student's level of motivation will be increased."

a) Increase in school attendance. For each student, school absences during the program trimester were compared with school absence for the same trimester of the previous school year:

School Absences	$\bar{X}$	N	T	
1977-78	6.76	36	.588	Not significant at
1978-79	7.25			the .05 level.

Thus there was no significant change in attendance:

b) Program "cuts". The distribution of program "cuts" was as follows:

No. of "Cuts"	frequency	%
0	30	75%
1	3	7.5
2	3	7.5
3	1	2.5
4	1	2.5
5	1	2.5
6	1	2.5

c) Rate of assignments completed. Records were kept of the number of assignments completed for each student during the first and last third of each trimester. There were five assignments to be completed during each third of the trimester.

Assignments completed	$\bar{X}$	N	T	2-tailed probability
1st third	3.51	36	3.63	$P < .01$
last third	2.75			

This shows a significant decline in the number of assignments completed. This was probably due to the staff becoming lax in requiring that these be turned in.

d) Amount of volunteerism. Records were kept on the amount of time that students engaged in non-required activities. These included Basic Aid Training, Cardio Pulminary Resusitation (CPR), hospital visits, making posters to publicize the program on health concepts, extra reports, hypertension screenings, tours, special class presentations, setting up bulletin board displays, working on the video tape about the program, writing articles about the program, and attending conferences as a representative of the program. The range of time spent in these activities was between 8 and 94 hours, with the mean equal to 28.8 hours (S.D. = 16.14). The hours spent in these activities totaled 1,122.

e) Social and Personal Responsibility Scale. A T-test was performed on the pre- and post-scores on this scale.

	$\bar{X}$	N	T	2-tailed probability
pre-test	73.17	30	.25	.81
post-test	72.89			

Thus there was no significant change in the scores on this scale.

In the three measures of motivation where it is possible to perform a statistical test, there was no change in the measure and in the third there was a significant decrease in the measure (a 22% drop in the number of assignments completed).

Objective Five: Student's level of achievement in science and communication skills will rise."

a) Science Achievement. As a part of the biology class, laboratory performance tests and classroom tests developed and administered by the biology teachers. The students' grade for biology was based on these factors plus laboratory reports and class participation. The

criteria for success was 80%. Thirty seven of the 40 students were able to satisfy this criteria for a 92.5% success rate.

b) Writing Proficiency. Samples of writing were analyzed to determine if writing proficiency had been affected by the program.

1. Raw number of errors:

	$\bar{X}$	N	T	2-tailed probability
pre-test	19.55	23	.46	not significant at the .05 level
post-test	18.45			

2. Writing ability:

	$\bar{X}$	N	T	2-tailed probablity
pre-test	3.24	23	1.52	not significant at the .05 level
post-test	3.63			

3. Ability to Communicate:

	$\bar{X}$	N	T	
pre-test	2.44	23	1.29	not significant at the .05 level
post-test	2.68			

Thus the program had no measurable affect on writing ability.

Objective Six: "Students' attitude toward hospitals will become more positive." This was measured through the use of a Semantic Differential Attitude Scale. The results are below. None of the ratings showed any significant change.

	Term	Pre-test $\bar{X}$	Post-test $\bar{X}$	N	T	2-tailed probability
1.	Mean: kind*	6.235	6.998	34	-.43	.669
2.	Worthless: Valuable	6.294	6.500	34	.75	.456
3.	Passive: Active	5.531	5.969	32	1.39	.174
4.	Unimportant: Important*	6.500	6.765	34	1.00	.325
5.	Weak: Strong	6.000	5.849	33	-.38	.707
6.	Dumb: Smart*	6.394	6.546	33	.84	.406
7.	Boring: Interesting*	6.265	6.147	34	-.54	.594
8.	Bad: Good	6.69	6.303	33	-1.55	.130
9.	Unpopular: Popular*	5.563	5.938	32	1.17	.250
10.	Useless: Useful	6.485	6.455	33	-.10	.923
11.	Ugly: Beautiful*	5.333	5.515	33	.84	.404
12.	Sick: Healthy	4.531	4.156	32	-.86	.397
13.	Serious: Humorous	2.061	2.152	33	.30	.763
14.	Slow: Fast	5.355	5.355	31	0	1.00
15.	Incompetent: Competent*	5.788	6.061	33	1.03	.312
16.	Sad: Happy	4.333	4.879	33	1.33	.194
17.	Sour: Sweet*	4.581	5.032	31	1.44	.161
18.	Simple: Complicated*	5.515	4.970	33	1.72	.095
19.	Repulsive: Lovable*	5.059	5.324	34	1.04	.306

*These items have had their direction reversed. The higher the score the more the hospital was seen as having the characteristic on the right. Scale range was one to seven.

Objective Seven: "To expose minority youth to positive role models, often absent in the inner city."

This was measured in two ways:

a) Proportion of minority preceptors (that is, hospital staff who supervised students). There was only one preceptor at the Veteran's Administration Hospital who was a minority member. Thus an important opportunity for role model contact was not provided. The reason for this is due to the lack of minorities from the Veteran's Administration Hospital who could serve as role models.

b) Hours of Pupil Contact. This was provided through class presentations, and field trips. The mean number of hours of pupil contact with minorities in the health profession was 23.4 (S.D. = 9.3). The range was from a minimum of 15 hours to a maximum of 63 hours.

Objective Eight: "To produce a new educational context which infuses aspects of related work, skills, and experiences into a science curriculum."

Program philosophy demanded that all activities be exploited to promote integration of students' experiences from the hospital, laboratory and field trips. For this reason, topics from a general biology curriculum were organized into units which corresponded to medical divisions or specialties within a health care facility. These units included: 1) The senses - ear, nose and throat; 2) Internal Medicine - digestion and nutrition; 3) Cardio-Pulmonary - heart and lungs, vascular system and blood; 4) Neurology - brain, nervous coordination; 5) Pathology - bacteriology, slide preparation, staining; 6) Metabolism - hemostatic mechanisms; 7) Environment - smoking, drugs, pollution; 9) Reproduction and Genetics - sickle cell anemia, blood type, male-female anatomy.

These units served to focus attention on specific aspects of weekly program activities. For example, integration of experiences related to the topic of neurology was accomplished in the following manner:

1. Students dissected the brain and traced important nerves in their fetal pigs.
2. Those students who worked on neurology wards in the hospital described their experiences with patients in whom various neurological capacities have deteriorated. Chronic alcoholics were typical examples of patients whose nervous functions broke down. Our students described how they fed and "walked" patients in the ward.
3. Other students demonstrated to the class features of experiments they worked on in brain function in the geriatric research area of the hospital.
4. During this time, we arranged for a guest speaker to inform the students about epilepsy.
5. A field trip to Fairview Hospital included a visit to the physical therapy-rehabilitaton ward for stroke and paralysis patients.
6. Finally, the biology teacher assigned reports to each student. These reports were directed at neurologic disorders and designed to give additional information to the students. Several reports were given orally to the class during the laboratory period.

A second example of the type of integration that occurred involves the topic of Cardio-Pulmonary Activity.

1. Students dissected the heart, lungs and major blood vessels in fetal pigs.

2. A lab experiment was done to illustrate lung capacity.
3. Students described working with patients who were connected to respirators on wards at the hospital. As students described the respirators and the necessary settings, the previously puzzling "2000 cc" indicator took on meaning since they had exhaled this volume into a balloon the day before.
4. Other students who worked in animal research demonstrated the dissection and function of the spleen to the class.
5. Guest speakers explained to the class the dangers of and tests for hypertension.
6. At this time the nurse educator showed the entire class how to use the blood pressure cuff. From this point on, nursing students assisted on wards by taking blood pressures.
7. The class sponsored a hypertension screening clinic at the school. They also publicized the screening with informational posters and flyers.
8. A field trip to the Department of Public Health included a visit to the inhalation therapy facility and illustrations of the affects of emphysema and tuberculosis.
9. The science teacher assigned reports which were completed orally or in writing on this topic.
10. All students took and passed the Red Cross 3 hour CPR course - "Race for Life."

The same general approach was taken for all additional topics. For each unit, material was extracted from student demonstrations, guest speakers, field trips, laboratory exercises, reports, specific nursing techniques and

students' descriptions of relevant experiences at the hospital. Because of this approach the study of Biology became tangible for many students who, previous to this class, had never studied the subject.

Aside from the general approach of integration, several special topics were introduced which further took advantage of our location and access to hospital resources. These studies included cancer, autopsy, and death and dying. For each of these areas, the class toured the appropriate hospital area, participated in a seminar conducted by the course educator and related experiences from the hospital which were germane to the discussion.

An outgrowth of student descriptions of their work at the hospital was intervisitations of students while at the hospital. All students participated. Each acted as guide for their particular section. In this way, students explored new areas of study as well as new career possibilities.

Finally, the nurse educator played a role in establishing the relevance of the science curriculum. When the class studied measurement, she explained hospital procedures for intake and output and graph charting of temperature, pulse rate and respiration. For cardio-pulmonary, she taught the class how to take blood pressures. She conducted the seminars on cancer, death and the autopsy. She also ran the post-clinical discussions. Finally, she explained body mechanics to the class when muscles were being studied.

Objective Nine: "To provide an opportunity for students to define more sharply career directions."

This was measured using pre-post comparisons on two scales:

a) Career Exploration Scale

	$\bar{X}$	N	T	2-tailed probability
pre-test	41.45	30	3.17	.004
post test	49.46			

Thus the students showed a substantial gain in their career exploration activity which amounted to p.1 points or a 19.6% increase. This gain was compared to the comparison group which had shown a non-significant pre vs. post gain in career exploration ($\bar{X}$ pre-test = 40.27; $\bar{X}$ post-test = 44.23; N = 33; T - 1.78, P = .085). An Analysis of Covariance was performed to determine if this program produced significantly greater gains in career exploration than other action learning programs that were neither as intense nor directed at career education. The post-test score of the career exploration scale was the dependent variable with the pre-test score serving as the covariate. The results (below) show that while the program significantly increased career exploration, it did not do it significantly better than the comparison group.

Analysis of Variance

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif. of F
Covariate (Pre-test score on Career Exploration Scale)	6601.33	1	6601.33	44.79	.001
Main Effects (Treatment vs. Comparison Group)	313.65	1	313.65	2.12	.150
Explained	7031.56	2	3515.78	23.85	.001
Residual	8841.54	60	147.35		
Total	15873.10	62	256.01		

76 cases were processed.
13 cases (17.1%) were missing.

b) Crites Vocational Maturity Scale. Here a t-test was performed on the pre-post scores:

	$\bar{X}$	N	T	2-tailed probability
pre-test	34.83	35	.1	.918
post-test	34.91			

The test shows no significant difference in the scores indicating no change on this measure.

B. Program Implementation

The program was well implemented. Initially the hospital had some reservations based on their experience with youth placed through the CETA summer program. However, the hospital became very enthusiastic about the program as word spread of the interest, helpfulness and enthusiasm of many of the students. The hospital staff that worked directly with the students enjoyed and took pride in the opportunity to explain their work. Some went out of their way to provide special opportunities and experiences for the students. At the end of the year the hospital held a special recognition party for the students at the hospital. The only changes that the hospital staff would make would be to increase the amount of time spent at the hospital from two hours twice a week to three or four hours twice a week and to have the students come in the morning when there would be more to show them.

The Biology class, held at Metro Community College, was deemed a success by staff and students as well. The facilities that the college provided were superior to what the school could provide. The teachers were able to do an adequate job of integrating the hospital experience with the laboratory demonstrations, experiments and lectures. There was general agreement that further integration of the hospital and laboratory experiences would be beneficial.

One afternoon class per week was devoted to the "Alternatives to the Streets" seminar. This was a variety of activities aimed at providing support, role models, career information and guidance through field visits to clinics and hospitals and guest speakers. This was the least well implemented portions of the program and one that requires considerable modification. It could be said that this was less of a seminar and more of a hodge-podge of activity that was not well integrated with the rest of the program. Generally, the programs were not stimulating, especially when compared to the hospital or lab experiences. Too many sessions were much like an ordinary class which may be acceptable for some subjects, but for career education, a dynamic experience orientation is most effective. For example, listening to a nurse anethetist talk about her job was boring for many of the students, but had they had the opportunity to observe her work during an operation and then talk to her afterward, they would have had a much more complete picture of her occupation -- and one that would be considerably more useful in making a decision.

Recruitment. A major difficulty in implementing the program turned out to be recruitment. Only 40 students were served by the program that had a projected capacity of 90 students. The evaluator undertook additional interviews to elucidate this. The major factor for the lack of students was the time of day that the program was offered. In the afternoon there was a great deal of competition from other programs and activities (such as part-time employment, work-study, programs at vocational-technical schools, band, choirs, and sports). The reason the program could not be held in the morning was due to the unavailability of a bus for transportation to the field sites.

This points to another flaw. The program had as a major goal to reach discouraged students and to raise their level of motivation. As the results

from the evaluation of Object One showed, the students who entered this program had initially high levels of motivation. That they enrolled in this program in spite of the above mentioned blocks and competition also speaks to their high level of motivation. This type of student is most likely to succeed with or without the program. Ironically, because of the way the program was set up, the student who this program was designed for may not possess sufficient motivation to enroll in the program. Clearly, the program must be modified to make it more accessable to low motivation students.

Nurse-educator role. This was an important position. Hospitals are complex bureaucracies with multiple authority systems. The nurse, because of her extensive experience in hospitals as a practitioner, educator, and administrator was able to act as a guide and liaison between the program and the hospital. This probably helped to avoid a number of problems and aided in the resolution of those that occurred. (As the nurse has stated, "With a nurse in the program, you can really talk to other nurses. You can talk the same language with them and empathize with their problems. It really makes a difference.") However, this is also the first position that could be cut from the program if there is a program staff member who understands the workings of the hospital or if there is someone on the staff of the hospital who will take on this role. (See cost benefit analysis.)

Role of the program staff at the hospital. The Biology teacher, the director and the nurse educator each were assigned to a third of the students. Their job here was to make sure the field placement went smoothly. Their presence at the hospital improved the experience for the students, some of whom were shy with the adults. Program staff would intercede on behalf of the student (this occurred in between one third to one half the students) to help them express their interests, capabilities, and sometimes their desire to take on more responsibility.

Minority involvement. For a program aimed at increasing the motivation of minority youth, minority staffing was notably low. There was only one staff member who was a minority and he was involved only during the Winter trimester. There was only one preceptor at the hospital who was a minority group member. While there is no direct evidence that this reduced the effectiveness of the program, it does contradict the goal of providing minority role models. However, none of the people that this evaluator interviewed (staff, preceptors, or students) thought that this effected the program. Even though several people thought that there should be more minority on the staff, they thought that should happen based on principle rather than on any direct evidence. This evaluator concurs that more minorities should be involved in the program as staff and preceptors (there were enough involved in the "alternative to the streets" seminars). While there is no evidence that this lack effected this program, there is research in other areas that would suggest that minority members could be more effective,in some respects, in motivating and relating to the students.

A question that this evaluator pursued was why did this program work so well while other programs involving teenagers at the hospital had been such disasters? As is often the case, everyone had a different opinion. The volunteer director at the hospital believed that the success of the program was attributable to the close supervision of the students by the program staff especially the nurse-educator, who kept the students in line. The preceptors believed that the program worked because the staff screened out the trouble makers. They believed that supervision added little because they never saw any effects of it and believed that they provided almost all of the supervision.

The program staff believed that the program worked well because of the guidance and support that they offered the students.

This evaluator believes that the reason the field experience worked so smoothly was due to three factors:

1) The main reason was that this was a highly motivated group of teens who had self-selected themselves because of a strong interest in health careers that transcended all the barriers to participating in the program.

2) The fact that the program was structured as an educational program rather than a strictly volunteer program or work program gave students access to a variety of experiences. In addition, they were accorded a special status as students which earned them extra respect.

3) Supervision played a role, but not as important as the volunteer director believed. This role was <u>not</u> to keep the students out of trouble but to promote their interests by helping them to relate to the hospital staff.

PARENT SURVEY

% answering in category

2. How much has your son or daughter talked, at home, about what they do in the program?

a good deal (1)	some (2)	very little (3)
83.4	11.1	5.5

3. How does this compare with how much they talk about other school classes?

more (1)	about the same (2)	less (3)
62.4	25.1	12.5

Following is a list of things which some people feel might be gained through Action Learning. Read each item and indicate whether you think your child's Action Learning program has helped him/her in that area. Circle the appropriate letter(s).

THE ACTIVITIES IN THIS PROGRAM SEEM TO HAVE HELPED MY CHILD LEARN	(1) Strongly Agree	(2) Agree	(3) Dis-Agree	(4) Strongly Disagree	Don't Know
4. Realistic attitudes toward other people (such as the kind he/she has been working with) . .	22.2	66.7	0	0	11.1
5. Knowledge of the community	27.8	50.0	11.1	0	11.1
6. A sense of usefulness in relation to the community	38.9	44.4	0	5.6	11.1
7. Knowledge about possible careers.	83.3	16.7	0	0	0
8. Realistic ideas about the world of work . . .	44.4	44.4	5.6	0	5.6
9. To assume new, important tasks in community and school.	23.5	52.9	5.9	5.9	11.8
10. To accept consequences of own actions	17.6	52.9	17.6	0	11.9
11. Deeper concern for fellow human beings. . . .	16.7	55.6	11.1	0	16.7
12. Increased problem-solving ability	22.2	50.0	11.1	0	16.1
13. Increased self-motivation to learn, participate, achieve	52.9	35.3	5.9	5.9	0
14. To be more assertive and independent.	38.0	44.4	5.6	0	11.1
15. To be more open to new experiences.	44.4	55.6	0	0	0
16. A stronger self-concept (sense of confidence, sense of competence, self-awareness)	38.9	50.0	5.6	0	5.6
17. Communication skills (listening, speaking, presenting ideas through variety of media) . . .	38.9	44.4	11.1	0	5.6
18. Gathering and analyzing information, observation, reflecting on experience.	44.4	50.0	5.6	0	0
19. How much knowledge do you think he/she gained compared to other classes	72.2	22.2	0	5.6	0
	much more (1)	more (2)	about the same (3)	less (4)	much less (5)

20. How effective do you think Action Learning is as an educational method?

very effective and useful (1)	somewhat useful (2)	not at all useful (3)
88.9	5.6	5.6

21. Would you recommend that the school continue this program?

very definitely yes (1)	yes (2)	not sure (3)	no (4)	absolutely no (5)
88.9	5.6	0	5.6	0

22. Other comments: (Please use back)

PARENT COMMENTS

This experience has been very beneficial to her. It has made her more open to communication.

This program treats the adolescent as a young adult, increasing his/her self esteem.

He has always been strong in these areas (nos. 10-19 on survey) so I found these difficult to answer. I do think that the out-of-the-building experiences enabled him to use these strengths (but not necessarily that he gained these strengths).

I wish this program could be continued - both for new students and for present students to go on to build on the experiences gained in this trimester program. I can't say enough nice things about the program - it's marvelous, particularly for the student who is alienated by traditional education.

She has gained much knowledge from this class. One good thing about it is that she not only liked the class, but she didn't get tired or bored with it. No complaints. I feel that the class was very beneficial to her and I'm glad she has taken this class. Good class.

SUPERVISOR SURVEY

% answering in category

2. The overall opinion of the work done by student:

Excellent 25.0 (1) Very Good 42.9 (2) Satisfactory 32.1 (3) Poor 0 (4) Unsatisfactory 0 (5)

For each of the qualities below, mark a point on the scale which coincides with your estimate of the student's ability or performance. There are seven position on the scale with the final one "N", indicating no opportunity to observe the student on that quality.

	(1)	(2)	(3)	(4)	(5)	(6)	
3. DEPENDABILITY	37.5	21.9	28.1	12.5	0	0	0
	Can always count on student		Usually Dependable		Irresponsible		N
4. COOPERATION	40.6	28.1	21.9	9.4	0	0	0
	Works very well with staff &/or supervisor		Works satisfactorily with others		Uncooperative		N
5. WILLINGNESS TO LEARN & IMPROVE	43.8	50.0	3.1	3.1	0	0	0
	Readily seeks or accepts help when appropriate		Accepts help somewhat grudgingly		Ignores needed help or is overly dependent upon help		N
6. SKILL IN COMMUNICATING WITH STAFF & OTHERS	15.6	28.1	46.9	9.4	0	0	0
	Outstanding ability to relate to others listens carefully & speaks clearly		Willingness to try to relate listens & speaks satisfactorily		Unable or unwilling to try to relate doesn't listen, speaks incoherently		N
7. PROBLEM SOLVING	21.9	18.8	40.6	6.3	0	0	12.5
	Imaginative, resourceful in recognizing & solving problems		Satisfactory		Confused, haphazard in attacking problems		N
8. UNDERSTANDING OF PEOPLE	25.0	21.9	34.4	9.4	0	0	9.4
	Clear insights into personal/social problems of people		Some awareness		Indifferent or unaware		N
9. SELF-MOTIVATION	28.1	15.6	43.8	6.3	6.3	0	0
	Is able to function alone & does not need to be told what to do		Satisfactory		Needs constant supervision, cannot work independently		N
10. PERSEVERANCE	31.3	21.9	37.5	6.3	0	0	3.1
	Perseveres in difficult, even routine tasks		Works well at jobs that interest him		Quits at first obstacle		N
11. CHALLENGE	15.6	40.6	25.0	12.5	0	0	6.3
	Enthusiastically seeks out difficult challenging tasks		Prefers safer, less threatening tasks		Unable or unwilling to do difficult tasks		N
12. SELF UNDERSTANDING	31.3	31.3	18.8	9.4	0	0	9.4
	Has accurate sense of own abilities & interests		Accurate in some areas		Inaccurate sense of abilities--exaggerates or underestimates		N
13. CURIOSITY	40.6	25.0	25.0	9.4	0	0	0
	Always finds something interesting to do, look at, ask about		Interested in things pointed out to him		Shows no interest in tasks, people or surroundings		N
14. PERFORMANCE	15.6	34.4	43.8	6.3	0	0	0
	Goes beyond expectations		Does a good job on assigned tasks		Does less than is asked or able to do		N

SUPERVISOR COMMENTS

He listens very intently and asks questions that reflect more than just good understanding, i.e., a real consideration of what he is having explained to him. I believe he has a powerful "cerebral" kind of enthusiasm but is not emotionally enthusiastic. Thus, initially he comes across as apathetic, however one soon realizes just the opposite is true.

She shows great interest in the field of Histology. I only hope she continues in a medical related field (such as medical technology). Her interests will take her a long way!!

She reported promptly to Ward 3D on assigned Wed. and Thur.! She always greeted staff and began duties she was expected to do. She showed an interest in nursing functions and was especially interested in assisting a nurse in her primary patient care, such as taking patient to his therapy or to another ward area.
Cleaning was routinely accomplished -- mostly cleaning bed side stands. She made a neat hospital bed. Gave each patient fresh drinking water. The above tasks were done routinely.

Attendance overall poor.

She has been very helpful on wards 7I and 4D. She has helped us during our ward's moving from ward 7I to 4D. The patients have really enjoyed having her come around to visit with them. She has distributed fresh water each day and spent time talking to the patients about their disease, their families, and their interests. She has been interested in watching chemotherapy administrations, learning to check diabetic urines, colostomy bag applications, etc. She watched an EEG being conducted.

She was very pleasant to work with. She seemed very eager to learn about the various nursing skills, and concepts. She seemed rather disappointed when vital signs were no longer a responsibility. Felt she is a bright girl -- curious, scared at times, timid, excited. Her interests seemed more with action events, i.e., cardiac arrests -- although she acquired an interest in how nurses and doctors really functioned (compared to TV). She was a joy -- hope someone encourages her to pursue greater things.

She was a joy to have on our ward this past quarter. She is a mature and intelligent student. She always conducted herself in a courteous and thoughtful manner.
She showed caring and concern for patients and was able to stay with a patient, she had known and had accompanied on trips, while he was dying. She demonstrated compassion while with the patient, and the family was very impressed and felt comforted by her concern. Although Karen had never come in contact with a dying patient before and was understandably apprehensive about doing so, she requested to see him because she had known him before. Her concern and feeling for the patient was more important to her than avoiding a painful experience. Karen's sensitivity and compassion for other people will be an asset to her if she chooses nursing as a career, unless she allows her feelings to alter her objectivity.
She asked questions about events she was seeing that demonstrated depth of thought and reflection. We hope that she had a valuable experience this quarter. We will miss her.

SUPERVISOR COMMENTS (cont.)

She has been prompt and always reports when arriving and leaving. Her enthusiasm and seeking out of information has been appreciated by the staff. A change in time from afternoon to morning would make it more interesting for the students as there is more activity in which they could participate.

It would have been helpful to go over this form at the midway point of this experience as it is helpful for pointing out areas of needed improvement.

She has shown considerable growth in her short time with us -- she appeared to be very shy which was a handicap initially, however, she overcame much of her shyness and sought out experiences. She is very pleasant -- courteous and well-groomed. She established effective interpersonal relationships with most staff members -- we really enjoyed having her with us this quarter.

His dedication and sense of responsibility were highly appreciated.

We enjoyed having him here and wish him well in future endeavors.

It was a pleasure having her working with us, she is a very enthusiastic person. I might add, that the externs she was working with also commented on her ability and willingness to learn.

She is a very inquisitive young girl, she is always pleasant and friendly to patients and staff. She always enjoyed new experiences and looked for these often. Every new experience was truly a joy!

It is very difficult to evaluate him because of the large amounts of absence, this is not to say that he was irresponsible, but merely to point out because of his absence it is very hard for me to give a fair evaluation.

He is interested and eager to learn; he has been helpful on the ward and works well with other people.

I have enjoyed working with her. She has exhibited improvement in her interpersonal skills and was able to handle herself in a mature manner in a difficult setting.

STUDENT'S PROGRAM RATINGS

% answering in each category

1. What is your overall rating of this program as a learning experience?

Excellent	Good	Poor	Terrible
51.4	48.6	0	0
(1)	(2)	(3)	(4)

2. If you had an excellent or good learning experience, what made it good or excellent?

Learning about careers	29.6%
Learning about myself	25.9
Other	18.5
Relationships	11.1
Lots of things	11.1
Self testing	3.7

3. If you had a poor or terrible learning experience, what made it poor or terrible? Not applicable.

INSTRUCTIONS: The following list describes some features of a community field experience. Please describe <u>your</u> particular experience by circling the appropriate number.

		(1) Pract. Never	(2) Once in Gr.while	(3) Some times	(4) Fairly Often	(5) Very Often
4.	Had adult responsibilities	8.6	8.6	31.4	22.9	28.6
5.	Had challenging tasks	14.3	17.1	31.4	20.0	17.1
6.	Made important decisions	17.1	17.1	28.6	20.0	17.1
7.	Discussed my experiences with teachers	11.4	22.9	25.7	20.0	20.0
8.	My ideas were ignored	44.1	26.5	17.6	5.9	5.9
9.	What I did was interesting	0	14.3	20.0	20.0	45.7
10.	Did things myself instead of observing	5.7	11.4	40.0	22.9	20.0
11.	Given enough training to do my tasks	0	11.4	20.5	26.5	41.2
12.	I was given clear directions	0	8.6	22.9	11.4	57.1
13.	Had freedom to develop and use my own ideas	14.7	17.6	11.8	20.6	35.3
14.	Discussed my experience with my family and friends	2.9	8.8	23.5	17.6	47.1
15.	Adults at site took personal interest in me	5.7	8.6	22.9	31.4	31.4
16.	Had freedom to explore my own interests	11.4	5.7	34.3	20.0	28.6
17.	Had variety of tasks to do at the site	12.1	18.2	33.3	24.2	12.1
18.	I never got help when I needed it	53.1	15.6	15.6	6.3	9.4
19.	Was appreciated when I did a good job	9.1	9.1	12.1	21.2	48.5
20.	Adults criticized me or my work	48.5	24.2	21.2	3.0	3.0
21.	Felt I made a contribution	8.8	20.6	23.5	23.5	23.5
22.	Applied things I've learned in school to my community placement	17.1	2.9	42.9	22.9	14.3
23.	Applied things I've learned in my community					

C. Subjective Data

Qualitative Analysis of Writing Samples.

The students were required to write weekly reports on their field experiences. A sample of these essays was evaluated on the basis of both writing mechanics and style. In addition, qualitative content analysis yielded more information about the students' reactions to the program. Overall, the response to the program was very positive:

> "Anyway, my feelings of what I do are pretty good. It's a lot more fun than what I might be doing."
>
> "I'm learning a lot from this class."
>
> "All in all I felt the trip was well worth the time, effort, and talent that took to get it off the blackboard and into the hospital."
>
> "I think that this class is very important to us."

The students were most enthusiastic about the opportunity to observe unfamiliar professions first-hand and to learn skills which enabled them to participate in these professions:

> "It was fun because I never made up a bed the correct way before."
>
> "I feel good -- learning about new things I never knew about before."
>
> "Well, I thought the surgery was interesting, because I have never seen the heart in real life before."
>
> "I have never seen the inside of a dog and the way it looks is amazing."
>
> "Now this was very interesting because it was my first time seeing babies as little as those. It was very new to me... One thing I liked about the visit was seeing surgery get done right in front of my eyes."
>
> "...it was pretty fun to do something I'd never done before. I mean I'd see these people do these things sometime,but I didn't figure on doing it myself and when I did do this I enjoyed it."

Almost as important as the stimulation of new experiences was personal interaction -- both student/supervisor and student/patient.

Supervisors were frequently discussed, indicating their significance to the students' experiences. Most often they were seen as caring and competent professionals. Students frequently described their supervisors' careful explanations and genuine concern for their needs:

> "(My preceptor) wanted to have a conference to find out about what I thought of the job. Because she wasn't sure if I liked it or not. She thought that maybe I didn't like it because there wasn't very much for me to do."
>
> "On Wednesday (My preceptor) asked me if there was anything more I'd like to see before I left. I liked going on the wards with him so that's what I chose."
>
> "Working with these patients and other patients you learn a great deal from your supervisor."
>
> "In my area the people are really nice, especially (my preceptor). She is really great with me, she understands how I might feel and she tells me everything I might need to know. She is also very good with her patients; they really like her."
>
> "Today I am realizing that last week I was afraid of going to this alone, because I had heard that the nurses didn't like blacks, but you know what? They really are not as bad as people made them up to be. They are all willing to help me find out as much about the V.A. as I can."*

Several comments indicated that the students felt comfortable asking questions of their supervisors and that the supervisors were willing to discuss the young people's concerns with them:

> "On Wednesday (my preceptor) and I sat down and talked about my reasons for wanting to work here...He asked me what I thought I'd be doing. I was right, boring work. But I also told him I have a lot of questions about the mind. Being exposed to people that actually know this area would be very beneficial to me."
>
> "I asked a question of how you could determine the age of a brace. He told me that if he wanted to find that out he could look back at the number on the leather."
>
> "This worried me. If blood clots were this large in such small vessels of animals, they must be dangerously large in humans. But they told me the blood is runny when it comes out, but coagulates after it comes out."

---

*It is interesting to note that this is the only reference in these reports to interracial tension.

For most of the students on the nursing wards, the most significant part of their work experience was not their tasks, but their involvement with patients. Many of the students expressed ongoing interest in and compassion for patients; some formed even closer attachments:

> "I had no idea I would get to meet someone like him. He's the kind of man who would make everybody love him!"
>
> "I visited with some of the patients and they really seemed to like talking to me because I guess they feel that I'm interested in what they have to say. Also I'm sure that they like to talk but no one will listen to them, so when I get there I give them a chance to talk or say something that has been on their minds."
>
> "I met this patient named Dave, the one that I took a picture with. Me and him were the best of friends. He's gone to a rest home. I received a letter from him on the 10th. He said that he was glad that he got to know me a little and that he missed me."

The positive impact of student/patient interaction is particularly reflected in the increased self-esteem reported by some youth:

> "I learn that I'm somebody. I'm being depended on. I'm being trusted and that's a good feeling."
>
> "He also told me a lot of the people there in the hospital made him nervous, so I asked him if I made him nervous and he replied 'no.' I then asked him why didn't I make him nervous and he said 'I don't know, I just feel comfortable talking to you.' It made me feel kind of good inside knowing that I could communicate with him."
>
> "I feel proud of myself."
>
> "Just helping someone makes me feel good inside."
>
> "The patients talked me to death when they found out it was my last day. I got a few invitations to come back. That made me feel like I was a friend to all the patients I had talked to. That made me feel real good."
>
> "So I went into the rooms and talked with the patients, we talked about many things... they seem to understand me and that made me feel good inside. I am glad that we can do things for others without being a doctor or nurse."

Besides social interaction, other job characteristics which the students value highly were variety of tasks, being able to move around, and keeping busy:

"I really felt that today was my best day ever being there because they had a lot of different things for me to do."

"My first couple weeks at the hospital were fun. I started doing a lot of different things."

"I'm starting to like where I'm working at. I think the only reason I didn't like what I was doing before is because that's all I did was made beds. But now I go around with one of the nurses."

"I had so much fun today, because I had a lot to do."

Many of the youth indicated increased awareness about the health professions:

"I did the usual, such as suctioning, cleaning the tools, and also calling the patients into the office."

"In the EKG ward they monitor people's heartbeats by picking up the electronic signal from the heart. With this they could possibly detect a heart attack if the signals are irregular."

"Arteriotomy was the assigned operation while I was there. The dog's abdominal cavity was sliced into, and using a vein eraser to burn the bleeding blood vessels closed, they kept blood from obstructing their work. They tied off two ends of an artery with an inch or so in between the clampings. The artery was then sliced lengthwise and then sewn up. The clamps were removed, and if they had succeeded, the artery was not to leak blood with the pressure exerted from the heart pumping."

"I would say that the movie (One Flew Over the Cuckoo's Nest) gives people a bad impression of a psychiatric ward. On the O.T. ward everyone has respect for you. They are all treated like human beings and not objects."

"He said it's a relaxed type of work (medical illustrator) with little pressure. As commercial artists, people have supervisors who usually are artistically inclined, so they are rarely pleased by work unless it's perfect. Doing work for doctors (usually with no artistic background) is not so hard or demanding...so you're not always competing for the best which can cause lots of stress!"

Related to the students' increased knowledge of these professions, they also demonstrated movement toward career decisions and increased self-knowledge about their suitability for a health career and their values regarding work:

"A job where I can always learn something new, keep expanding my knowledge is important. Even over the school summers, short as they are, I get restless to write, to learn. I can't stagnate."

"I don't think this career is for me because I don't have the patience to take all this time on my hands. I might like to work with babies because I love children and I love working with them."

"If I were a surgeon I think I could do it because it would take someone who was serious and would have a steady hand."

"I prefer working with and around animals. I think animals are easier to get along with than most people."

"I don't think I'd like working here. It was an interesting field trip, because the knowledge can pertain to humans also. I'd rather work on people, where the description can come directly from the patient, machines and your diagnosis. With animals, they can't verbally tell you beneficial information."

"I don't think I would enjoy a job like this because I really can't stand the smell."

"I enjoy this section of the hospital very much and might decide to make a career of it."

"...I feel so helpless. But I say in my mind 'just wait until you're a nurse!"

An important area of self-insight involved feelings about death and dying. The students on the nursing wards were exposed to death, and they often expressed strong reactions to this unfamiliar experience:

"Today a patient passed away. I did not get to meet him. I really feel bad at this moment. It is very sad to hear that death has just happened."

"(My preceptor) told me that Mr. ___ had died. Now at first I didn't know what to think, because I had just been in there giving him water about a half hour earlier. So it was kind of hard to believe at first, but then I figured this is a cancer ward, so you have to expect it."

"I had a strange feeling as I read the note attached to one brace. It read 'Patient Passed Away'. I sort of wondered if it was ever used."

"(from a poem) To be alive is a life to give or take, but when someone dies, you begin to break."

"It bothers me that I could die of something I have no control over (after observing an autopsy)."

"I also experienced a lot of death. It affects the nurses a lot and me too. When I got home I cried because I was getting to know the patients. They all talk with me and they were all kind people."

"I think that is very sad to hear that you have cancer and that you have so long to live. There are very sick people on the ward, and they need all the help they can get and while I am there, I will try my best to help."

"I see people dying up on my ward and I feel helpless."

Negative comments about the program were rare. When complaints were made, they focused on work that was boring, a lack of organization, or unclear explanations:

"When you go on a field trip like that one, you should already have everything okayed! But you all didn't! We had to stand and wait just to see if we could do or see something! We couldn't even see most of the things we were scheduled to do or see."

"The nurse told me why but I didn't really understand it."

"We went to visit the surgery observation room. I didn't learn very much until we had a discussion back at school."

"I thought today was pretty boring. I hate films!"

"This trip was not all that good because we really did not see much. We spent most of our time taking blood pressure and that got boring after awhile."

"We were exposed to opthalmoscopes, but we weren't clearly taught how they work."

"I think next year when you have this program you should have the students to be able to move and do the other things in the hospital so that they get a variety of things and they also don't get bored so fast."

There was evidence that some students' opinions regarding the program, which were negative at first, improved during the course of the trimester sometimes due to the efforts of program staff to help the students process their experiences and occasionally to intercede with their preceptors on their behalf:

"I'm starting to like where I'm working at. I think the only reason I didn't like what I was doing before is because that's all I did was make beds. But now I go around with one of the nurses."

"This week was a whole lot better at the VA."

"Thursday I was back up in dental. It was the same except I think I'm doing more work because of you, I know you said something, thanks a lot."

This assignment generated two types of essays: (1) those which feature an objective tone, and (2) those which feature a subjective tone. The former type was most often written by students who did not have contact with patients; they may, for example, have observed or worked in orthotics. These reports were primarily detailed technical accounts of the experience, with very little information regarding the students' ideas or feelings about the experience, their interaction with health professionals, or the value of the experience in the context of the program or their lives. The latter type of essay was usually written by students who worked in patient-care settings. These reports often contained information regarding the students' interaction with supervisors and patients, their feelings about themselves and others, and their feelings about the experience and its significance for their lives.

The nature of the difference between the compositions written by students in different settings suggests two ideas: (1) The technical focus of the laboratory setting encouraged the technical tone of the reports; while the people focus of the patient-care setting encouraged more attention to relationships and feelings. (2) The students who chose the laboratory setting were generally more idea-oriented; while the students who chose to work in a patient-care setting were more people-oriented.

PROGRAM STAFF COMMENTS FROM INTERVIEWS

Biology Lab. "We were into basics. We tried to keep the labs simple. We didn't have top students. We did a lot of stuff but they didn't understand the purpose or the results. They couldn't follow directions a lot. (The program director) helped a lot. We really needed that."

"Atmosphere at Metro was good."

"Would want more time for post lab debriefing to check on understanding."

"Students were lax in getting their reports in."

"M-F schedule lab too long a break between classes."

"Breakdown lab into sections -- a high level group and a lower level group."

"Nurse-educator should be more involved in the biology labs both as an instructor and as a curriculum consultant."

Effects of the Program:

"It gave them exposure (to the health professions). It wasn't like watching a movie. They were involved. They learned about what happens at a hospital."

"It was a good feeling seeing the kids helping people."

"Overall, I thought it was super!"

"I wasn't sure about the program at the beginning because it was new. But it turned out to be very good. Everything positive."

"The kids responded to the attention of that many adults. They gained insight into what they should be doing next year. Lots are signing up for Biology and Chemistry next year. They get lots of encouragement. They are not afraid of hospitals anymore."

"This program increased their ability to 'get information' on a situation -- it increased their self-confidence. They knew what they were doing was important and this helped them feel better about themselves. It was fun and it introduced kids to health careers."

"A big effect on the kids was in the job decision-making process. The program definitely added information. Also, about five students ruled out health careers. They discovered that they did have the personal characteristics to be in a health profession such as the ability to deal with stress and the ability to work with people. Some saw that a lot of commitment was needed and didn't want to make it. The seniors became more committed to health careers and made arrangements to pursue training after graduation. Some would have done it anyway. Some increased their commitment. Some people confirmed what they wanted to do and helped them get into the right program."

"It increased their self-esteem and confidence. If you talk with them when they come off the ward they say things like, 'I felt like a real nurse today.' or 'I feel like I can do things and contribute,' or they would come off the ward whistling and say 'I did this' or 'I did that'."

"The quality of the experience for the students depended on how assertive they were. If they just sat around when they were done with a task, they didn't get much out of the program. You have to ask about what's going on; ask if you can watch, if you can try things."

VA Hospital:

"The Veterans Administration Hospital was a good place to do the field experience. They have lots of services, many more than most private hospitals. And the VA is geared to volunteers."

V. Cost Benefit Analysis

The program seemed beneficial in a modest way. While the students, the staff and the hospital were pleased with the program, paper and pencil tests did not demonstrate significant change in many important areas. The costs of the program were high and are broken down as follows:

Account	Federal Funds	Local	Total
Personnel	49,300	1,800	51,000
Fringe Benefits	8,381	--	8,381
Travel	1,002	--	1,002
Equipment	--	2,000	2,000
Supplies	5,000	--	5,000
Other	8,351	11,450	19,801
Overhead	12,966	--	12,966
Totals	85,000	15,250	100,250

Of the $85,000 received in federal funding, approximately ten percent or $8,500 was returned. This was primarily due to funds in the personnel account not being used because the actual wage scale was lower than that specified in the budget and because less than the budgeted number of hours were worked.

The actual program cost was

Total program cost	$100,250
Funds returned	-8,500
Funds Used	$ 91,750

One-time cost not repeated in subsequent program years:		
Equipment	$2,000	
Travel	1,002	
Testing	1,500	
Evaluation	4,000	
Consultants	3,000	
Subtotal	11,502	- $11,502
Estimated Program Cost		80,248
Cost per student (@ 40 students)		2,006
Cost per credit (@ 3 credits/student)		669

Salaries were the single most expensive area, taking up approximately 68% of the budget. While it appears from this evaluation that the program was over-staffed, it would be difficult to reduce cost for the following reasons:

1. If the program had been run at its capacity (90 students), it would have used up the slack in the staffing. This program requires considerable contact with the students, the hospital staff, and resources in the community and requires a high staff/student ratio.

2. Because a mix of skills and experience is needed it is not likely that these roles could be consolidated in fewer staff.

However, staff requirements could be reduced by the following measures:

1. The nurse-educator role could be handled by the nurse educators on the staff of the hospital. Savings: $9,388.

2. The science teacher could be reduced to half time if enrollment remained at current levels. Savings $9,664.

The most significant reduction in cost per student-credit could be produced through an increase in enrollment. As mentioned earlier, this would only require that the program be offered in the morning when there would be less competition. Given a program run at capacity and the elimination of the nurse educator position, the cost per pupil per credit would be $ 262.

VI. Summary, Conclusions, and Recommendations

A. Summary and Conclusions

The Health Careers and Science Action Learning Program was held at the Central High School, Minneapolis, Minnesota, during the 1978-79 school year. The overall goal of the program was to raise the career aspirations of minority youth and to provide them with some of the academic skills and vocational support necessary to achieve their heightened aspirations. The educational strategy used was the Action Learning Model which posits that people learn best from direct experience in "new roles featuring significant tasks with real consequences." The staff consisted of a full-time director, a part-time nurse-educator, a part-time biology teacher and a part time secretary. The program consisted of three components:

1. Two 2-hour field placements per week at the V.A. Hospital on nursing wards and other medical specialties.
2. Two 2-hour biology classes per week at Metropolitan Community College.
3. One 3-hour period of special activities ("Alternative to the Streets" Seminar) including field trip, vocation counseling, and guest speakers.

The original evaluation plan called for a "true" experimental design with random assignment to either the program or a waiting list. Pre-post measures were to be administered. Other data collection included interviews with staff, hospital personnel, shadowing students on field trips and at the hospital and observing classroom activities. Due to insufficient enrollment, a true experiment could not be executed and a quasi-experimental design was substituted.

The pre-post measurements showed few gains. Since the three classes were shown to be statistically comparable on important pre-test measures, they were combined for analysis. Presented below are summaries of the findings based on a pretest vs. post-test comparison.

Measure	Outcome
1. Semantic Differential Test: Attitudes toward Hospitals (for 19 adjective pairs)	No real change.*
2. Crites Vocational Maturity Scale	No real change.
3. Job titles Questionnaire-General (number of job titles student can list)	No real change.
4. Job title Questionnaire-Health	Real change -- students were able to name twice as many job titles in Health field at the end of the program than before. Pre-test $\overline{X}$ = 6.6 Post-test $\overline{X}$ = 9.8 P = .001
5. Aspirations - General	No real change.
6. Aspirations - Health	No real change.
7. Career Exploration: Measures amount of behavior directed toward learning about careers	Real change in a positive direction Pre-test $\overline{X}$ = 41.4 Post-test $\overline{X}$ = 49.5 P < .004

*No real change is a substitution for the statistical jargon of "no significant change."

8. Self Esteem in Social Situations	No real change.
9. Self Esteem: General	Pre-test $\overline{X}$ = 30.06
	Post-test $\overline{X}$ = 31.62
	$P < .05$
10. Social and Personal Responsibility	No real change.

In summary, based on what the pencil and paper tests can measure, the program contributed nothing in the areas of vocational maturity, self-esteem in social situations (or self-confidence,) attitudes towards hospitals, the number of general job titles they knew, their vocational aspirations.

In three out of ten areas that were measured with paper and pencil objective tests, students showed real gains in the post-test over their pre-test scores. This was in the area of the number of health careers that they could name General Self-Esteem and on the Career Exploration Scale.

This later pre-post difference was significant at the .004 level with a substantial gain of 8.1 points or 19.6% increase in activity aimed at exploring careers. This gain was compared to the comparison group which had showed a non-significant pre vs. post gain in career exploration. An analysis of variance was performed to determine if this program produced significantly greater gains in career exploration than other action learning programs that were not as intense or directed at career education. The results of this statistical test were not significant indicating that while the program significantly increased career exploration, it did not do it significantly better than other less intense programs.

Another area that should be pointed out was the area of career aspirations. As mentioned earlier, the aspirations of the students in this program were not

significantly increased. However, further analysis shows that these students began the program with initially higher levels of aspiration than the comparison group (significant at the .05 level.) Also their level of aspiration was higher than that of their family of origin (significant at .017 level.) From this information, one concludes that students enrolled in this program as a vehicle to achieve their already high aspirations.

The lack of results on "objectives" tests may be the result of trying to do too much. Too many and too stringent goals may have been set. This is especially evident in the area of communication skills where the only remediation provided was a chance to write and obtain written feedback on short weekly assignments. Realistically this would not provide adequate tutoring in this area and the writing test confirmed this. Also, staff time could be better spent on the motivational and career aspects, with the communications remediation perhaps being better treated as a separate program.

Students rated their experience highly. They thought that the hospital placements were especially valuable in learning about those careers and rated this as the best part of the program. Students were excited about having the world of medicine opened up to them first hand and by having a significant role in the hospital. The Biology class was also highly rated. The Special Activities Class Period was rated lowest. Compared to the activity at the hospital and the Biology Class, these activities seemed "boring."

B. Implementation Recommendations

1. The hospital staff (preceptors) and volunteer director were in general agreement that the length of time at the hospital was not adequate and recommended that the time be increased to three hours twice a week. This

evaluator believes that two hours twice a week would have been adequate had there not been so much time taken away from their "hands on" experience. While orientations, instruction, visiting other stations, and process seminars are worthwhile activities, they seriously erode the "action learning" component of the program. (Also, because students arrived at 12:30, some students would waste time waiting for their preceptors to return from lunch at 1:00 p.m. There were attempts to have preceptors anticipate this but they were not always successful. This problem can be alleviated by recommendation No. 2 below.) These activities could have taken place during the "Special Activities" class in school or during extra trips to the hospital. This would allow a full two hours for the hospital experience without making the class unnecessarily long.

2. A major recommendation is that the program take place in the morning as this would increase participation and the quality of the hospital experience and that special arrangements be made for transportation if necessary.

3. The Alternative to the Streets Seminar should be reduced in time and be better integrated with the rest of the program. Three hours per week proved to be too much time devoted to this activity and the freed up time should be used for activities that took away from the "hands on" experience at the hospital (such as instruction, tours and orientation) and for a weekly process seminar. (See #4) It is also recommended that these career activities be shifted to on-site demonstrations and observations of careers rather than panel discussions and speakers. This would reduce boredom and provide more impact.

4. A process seminar should become a regular (weekly) part of the program. A process seminar is a small group discussion aimed at processing, integrating, sharing feelings, thoughts and behavior of the participants. It

is a time to take stock of what has happened in the program and to "digest" it and make it real. This was partially but unsuccessfully implemented during the winter and spring trimester at the urging of the evaluator. This recommendation is based on two observations:

a) That students tended to under-utilize their experiences because they could not integrate the information;

b) Students were exposed to issues (such as death, crippling illness) which create strong feelings which need to be explored and dealt with. While the staff did attempt to do this on a one-to-one basis, there was not enough time available. A process seminar would help alleviate this.

5. More effort should be made to recruit minority and disadvantaged students with low motivation and career aspirations.

6. Follow-up should be provided beyond the ten week program. This should include vocation counseling, academic remediation, assistance with applications and financial aid requirements.

7. An attempt should be made to increase enrollment. While this may be largely accomplished through changing the time of day, some other actions should also be investigated:

a) Increased contact with parents using phone calls, mailings, personal contacts.

b) Opening the program to students from other high schools.

c) Pay students for their work at the hospital through CETA in-school program.

8. More effort should be made to increase minority staffing and preceptorships at the hospital.

LIST OF APPENDICES

A. Pretest Booklet One

B. Pretest Booklet Two

C. Posttest Booklet One

D. Posttest Booklet Two

E. Supervisor Survey

F. Parent Survey

G. Crites Vocational Maturity Test

H. Jobs I Know In the Health Field

I. Jobs Possible for Me to Fill

FINAL REPORT OF THE EVALUATION OF

THE HEALTH AND SCIENCE ACTION LEARNING PROJECT

APPENDICES

APPENDIX A

Pretest Booklet One

EXPERIENTIAL EDUCATION QUESTIONNAIRE

Center for Youth Development & Research
University of Minnesota
St. Paul, Minnesota

GENERAL INSTRUCTIONS:

We would like to ask your help in a study of action and service learning programs in schools all over the United States. This is the first time such a study has been done and your answers will be very valuable for understanding what students get out of these programs. This information can help to improve and strengthen these programs.

Please remember that the following questions have no right or wrong answers. We are only interested in your honest reactions. Please ignore the numbers in parenthesis next to the answer blanks--they are there to help us.

Please write as neatly and legibly as you can. It would be unfortunate if we could not use your ideas because we couldn't read your writing.

Thank you very much for your participation in this study. We think the results will be of real help to high school and junior high school students all over the country.

INSTRUCTION FOR SECRET CODE NUMBER:

Your responses will be held in strictest confidence. To make sure that no one knows who filled out this questionnaire and to be able to match your answers to another questionnaire you will take later, we want you to use the following secret code:

1) Write your birthdate in numbers in the space below. For example, if you were born on May 9, 1962, you would write: 0 5 / 0 9 / 6 2
(month / day / year)

__ __ / __ __ / __ __ (1-6)
(month / day / year)

2) Write your initials in the boxes below:

First letter of your first name: ☐ (7)

First letter of your last name: ☐ (8)

3) Write the name of your school below: (9-10)

_____

4) Today's Date: __ __ / __ __ / __ __ (11-16)
(month / day / year)

Pretest

QUESTIONNAIRE ONE

INSTRUCTIONS:

This questionnaire asks you to think of a job or career field that you might like to enter after completing your education and to answer some questions in relation to that career field or job. For the statements listed below please indicate on a scale of 1 (never) to 5 (frequently) how often you have had each experience during the past twelve months. Most students have had some but not all of these experiences. Therefore, if you have not had that experience mark the answer sheet as 1 for never. If you have had the experience--select 2 if you have done it only once, 3 if you did it several times during the year, 4 if you did it about once a month and 5 if you did it more frequently than once a month.

IN RELATION TO A JOB OR CAREER FIELD YOU MIGHT LIKE TO ENTER, HOW FREQUENTLY DURING THE PAST 12 MONTHS HAVE YOU:

	Never	Once	Several Times	Once a Month	More Than Once a Month	
1. Talked about the job or career with relatives or friends.	1	2	3	4	5	(17)
2. Talked about the job or career with persons employed in that career field.	1	2	3	4	5	(18)
3. Talked about the job or career with teachers or counselors.	1	2	3	4	5	(19)
4. Read materials about the job or career.	1	2	3	4	5	(20)
5. Observed activities in the job or career.	1	2	3	4	5	(21)
6. Tried out activities related to the job or career.	1	2	3	4	5	(22)
7. Worked in this job or career field.	1	2	3	4	5	(23)
8. Thought about racial, sex or other biases that may exist in the job or career field.	1	2	3	4	5	(24)
9. Thought about the steps necessary to prepare for the job or career.	1	2	3	4	5	(25)
10. Learned the range of pay for the job or career.	1	2	3	4	5	(26)
11. Learned the level of schooling or type of training required to enter the job or career.	1	2	3	4	5	(27)
12. Thought about the relevance of your current school program to the job or career field.	1	2	3	4	5	(28)
13. Learned the employment demand for people in this job or career field.	1	2	3	4	5	(29)
14. Thought about the lifestyle you would have with this job or career field (for example, the amount of money, working conditions, kind of friends).	1	2	3	4	5	(30)
15. Thought about how well the job or career field matches your interests and abilities.	1	2	3	4	5	(31)

QUESTIONNAIRE TWO

INSTRUCTIONS

A. Look at the sample question below, but don't answer it until you have very carefully read the instructions below.

Almost Always True For Me	Some-times True For Me			Some-times True For Me	Almost Always True For Me
☐	☐	Some teenagers worry about school grades	-BUT-	Other teenagers don't seem to worry about school grades.	☐	☐

B. To answer these questions, there are two steps.

1) First, decide whether YOU are more like the teenagers on the left side who worry about school grades OR the teenagers on the right side who don't seem to worry about school grades. Don't mark anything down yet, but first decide which type of teenager is most like you and go to that side.

2) Second, now that you have decided which side is most like you, decide whether that is almost always true for you or sometimes true for you. If it's only sometimes true, then put an X in the box under sometimes true, if it's almost always true for you, then put an X in the box under almost always true.

C. Now continue to do the numbers below. For each number, you only check one box.

	ALMOST ALWAYS TRUE FOR ME	SOME-TIMES TRUE FOR ME			SOME-TIMES TRUE FOR ME	ALMOST ALWAYS TRUE FOR ME	
1.	☐	☐	Some teenagers feel bad when they let people down who depend on them	-BUT-	Other teenagers don't let it bother them that much.	☐	☐ (32)
2.	☐	☐	Some teenagers think it's the responsibility of the community to take care of people who can't take care of themselves	-BUT-	Other teenagers think that everyone should just take care of themselves.	☐	☐ (33)
3.	☐	☐	Some teenagers are interested in doing something about school problems	-BUT-	Other teenagers don't really care to get involved in school problems.	☐	☐ (34)
4.	☐	☐	Some teenagers let others do most of the work in a group	-BUT-	Other teenagers help in a group all they can.	☐	☐ (35)
5.	☐	☐	Some teenagers seem to find time to work on other people's problems	-BUT-	Other teenagers find taking care of their own problems more than enough to do.	☐	☐ (36)
6.	☐	☐	Some teenagers are interested in what other students in class have to say	-BUT-	Other teenagers don't care that much about what other students say.	☐	☐ (37)

	ALMOST ALWAYS TRUE FOR ME	SOME-TIMES TRUE FOR ME				SOME-TIMES TRUE FOR ME	ALMOST ALWAYS TRUE FOR ME	
7.	☐	☐	Some teenagers are interested in doing something about problems in the community	-BUT-	Other teenagers are not that interested in working on problems in the community.	☐	☐	(38)
8.	☐	☐	Some teenagers carefully prepare for community and school assignments	-BUT-	Other teenagers usually don't prepare that much.	☐	☐	(39)
9.	☐	☐	Some teenagers would rather not present ideas in a group discussion	-BUT-	Other teenagers feel comfortable in presenting ideas in a group discussion.	☐	☐	(40)
10.	☐	☐	Some teenagers let others know when they can't keep an appointment	-BUT-	Other teenagers don't call ahead when they can't make it.	☐	☐	(41)
11.	☐	☐	Some teenagers think people should only help people they know--like close friends and relatives	-BUT-	Other teenagers think people should help people in general--whether they know them personally or not.	☐	☐	(42)
12.	☐	☐	For some teenagers, it seems too difficut to keep commitments	-BUT-	Other teenagers somehow manage to keep commitments.	☐	☐	(43)
13.	☐	☐	Some teenagers' ideas are almost always listened to in a group	-BUT-	Other teenagers have a hard time getting the group to pay attention to their suggestions.	☐	☐	(44)
14.	☐	☐	Some teenagers don't think they have much say about what happens to them	-BUT-	Other teenagers think they can pretty much control what will happen to their lives.	☐	☐	(45)
15.	☐	☐	Some teenagers don't think it makes much sense to help others unless you get paid for it	-BUT-	Other teenagers think you should help others even if you don't get paid for it.	☐	☐	(46)
16.	☐	☐	Some teenagers are good at helping people	-BUT-	Other teenagers don't see helping others as one of their strong points.	☐	☐	(47)
17.	☐	☐	Some teenagers feel obligated to carry out tasks assigned to them by the group	-BUT-	Other teenagers don't feel that bound by group decisions.	☐	☐	(48)
18.	☐	☐	Some teenagers think when good things happen it's because of something they did	-BUT-	For others, there seems to be no reasons--it's just luck when things go well.	☐	☐	(49)

	ALMOST ALWAYS TRUE FOR ME	SOME-TIMES TRUE FOR ME			SOME-TIMES TRUE FOR ME	ALMOST ALWAYS TRUE FOR ME	
19.	☐	☐	Some teenagers prefer to have someone clearly lay out their assignments	-BUT-	Other teenagers prefer to make up their own lists of things to do.	☐	☐ (50)
20.	☐	☐	Some teenagers aren't that worried about finishing jobs they promised they would do	-BUT-	Other teenagers would feel really bad about it.	☐	☐ (51)
21.	☐	☐	Some teenagers think they are able to help solve problems in the community	-BUT-	Other teenagers don't think they can do anything about them because a few powerful people decide everything.	☐	☐ (52)

QUESTIONNAIRE THREE

INSTRUCTIONS:
Read the sentences below and mark an "X" in the box that best decribes you.

	very often	fairly often	some-times	once in a great while	practically never	
1. How often do you worry about whether other people like to be with you?	☐	☐	☐	☐	☐	(53)
2. How often do you feel sure of yourself among strangers?	☐	☐	☐	☐	☐	(54)
3. How often do you feel confident that someday people you know will look up to you and respect you?	☐	☐	☐	☐	☐	(55)
4. How often do you feel self-conscious?	☐	☐	☐	☐	☐	(56)
5. How often do you feel that you have handled yourself well at a party?	☐	☐	☐	☐	☐	(57)
6. How often are you comfortable when starting a conversation with people whom you don't know?	☐	☐	☐	☐	☐	(58)
7. How often are you troubled with shyness?	☐	☐	☐	☐	☐	(59)
8. When you speak in a class dis-sussion, how often do you feel sure of yourself?	☐	☐	☐	☐	☐	(60)
9. When you have to talk in front of a class or a group of people of your own age, how often are you pleased with your performance?	☐	☐	☐	☐	☐	(61)
10. How often do you worry about how well you get along with other people?	☐	☐	☐	☐	☐	(62)

QUESTIONNAIRE FOUR

INSTRUCTIONS:

Following are three actual incidents encountered by students in their action learning program. Read each incident carefully and project yourself into the setting as if it is a situation that you must deal with personally. As you read the story, think about what things you would do or say in the situation. Then answer the questions below:

* * *

1. YOU ARE WORKING AT A NURSING HOME. YOU'VE COME TO BE REALLY GOOD FRIENDS WITH ONE LONELY OLD MAN THERE AND YOU VISIT HIM EVERY TIME YOU COME. ONE DAY HE TELLS YOU THE ONLY THING HE REALLY HATES ABOUT THE NURSING HOME IS THAT THE STAFF WON'T LET HIM HAVE A DRINK. HE HANDS YOU A COUPLE OF BUCKS AND ASKS YOU TO SNEAK A PINT OF BRANDY TO HIM THE NEXT TIME YOU COME. YOU SAY YOU CAN'T GET ANY BECAUSE YOU'RE UNDER AGE, BUT HE BEGS YOU. WHAT DO YOU DO OR SAY?

1. What's the first thing you would think of to do or say?

   a.

(63)

2. What other things could you do or say--try to list as many as you can.

   b.

   c.

   d.

   e.

   f.

(64)

3. Look back at what you wrote in No. 1 and 2 and list the letter of the one you think is best ____. Please explain why you chose it.

(65)

4. Choose one you rejected and list the letter of the item ____
   Please explain why you rejected it.

(66)

5. Explain what you think is the "real" problem behind the incident.

6. Have you ever had to handle a problem like this before? ____ yes ____ no (67)

YOU HAVE BEEN AN INTERN IN THE DISTRICT ATTORNEY'S OFFICE FOR THE PAST SIX WEEKS. FOR THE FIRST THREE WEEKS YOU ATTENDED REGULARLY. RECENTLY, YOU HAVE MISSED A FEW TIMES. YOU DID NOT ALWAYS CALL AND TELL YOUR SUPERVISOR, THE DISTRICT ATTORNEY, YOU WEREN'T COMING. SINCE YOU BEGAN YOU HAVE WATCHED SOME TRIALS, RUN ERRANDS, SAT IN ON INTERVIEWS WITH CLIENTS, AND DONE SOME FILING. YOU ARE SUPPOSED TO HELP WITH AN INVESTIGATION OF UNFAIR PRICING IN TWO DEPARTMENT STORES, BUT IT HASN'T STARTED YET BECAUSE YOUR SUPERVISOR HAS BEEN TOO BUSY AND YOU HAVEN'T BEEN THERE FOR A WHILE. JUST AS YOU ARE READY TO LEAVE SCHOOL TO GO TO YOUR INTERNSHIP, A FRIEND COMES UP AND SUGGESTS THAT YOU COME OVER TO HIS/HER HOUSE TO LISTEN TO RECORDS AND STUDY FOR A BIG MATH TEST TOMORROW. WHAT DO YOU DO OR SAY?

1. What's the first thing you would think of to do or say?

   a.

2. What other things could you do or say--try to list as many as you can. (68)

   b.

   c.

   d.

   e.

   f.

(69)

3. Look back at what you wrote in No. 1 and 2 and list the letter of the one you think is best _____. Please explain why you chose it.

(70)

4. Choose one you rejected and list the letter of the item _____
   Please explain why you rejected it.

(71)

5. Explain what you think is the "real" problem behind the incident.

6. Have you ever had to handle a problem like this before? ___ ___ (72)
   yes no (73=1)

card 2 - repeat 1-10

84-A

QUESTIONNAIRE FIVE

INSTRUCTIONS:

The purpose of this questionnaire is to measure the meaning which an idea or a kind of person has for you by having you rate it by a series of descriptive words. Please make your judgments on the basis of what the kind of person or idea means to you. Do not worry or puzzle over individual terms. It is your first impressions, your immediate responses, that are wanted. On the other hand, please do not be careless, because we do want your true impressions.

Here is how you are to mark this questionnaire. There are seven positions between each pair of words. If you feel the kind of person or idea is very closely related to one end of the scale, place your check mark next to that word (e.g. Hot: ___:___:___:___:___:___:___:Cold.) If you feel the idea or person is closely related to one end of the scale (but not extremely), place your check mark as follows: Hot: __:__:__:__:__:__:__:Cold. If the idea or person seems only slightly related to one side as opposed to the other (but not really neutral) place your check mark as follows: Hot: _:_:_:_:_:_:_:Cold.

ADULTS

		(1)	(2)	(3)	(4)	(5)	(6)	(7)		
1.	Friendly	:	:	:	:	:	:	:	:Unfriendly	(11)
2.	Powerless	:	:	:	:	:	:	:	:Powerful	(12)
3.	Boring	:	:	:	:	:	:	:	:Interesting	(13)
4.	Confident	:	:	:	:	:	:	:	:Insecure	(14)
5.	Honest	:	:	:	:	:	:	:	:Dishonest	(15)
6.	Changing	:	:	:	:	:	:	:	:Settled	(16)
7.	Selfish	:	:	:	:	:	:	:	:Unselfish	(17)
8.	Successful	:	:	:	:	:	:	:	:Unsuccessful	(18)
9.	Smart	:	:	:	:	:	:	:	:Dumb	(19)
10.	Unfair	:	:	:	:	:	:	:	:Fair	(20)
11.	Competent	:	:	:	:	:	:	:	:Incompetent	(21)
12.	Stubborn	:	:	:	:	:	:	:	:Flexible	(22)
13.	Kind	:	:	:	:	:	:	:	:Mean	(23)
14.	Serious	:	:	:	:	:	:	:	:Fun-loving	(24)

Being Active in your Community

		(1)	(2)	(3)	(4)	(5)	(6)	(7)		
1.	Smart	:	:	:	:	:	:	:	:Dumb	(25)
2.	Unusual	:	:	:	:	:	:	:	:Usual	(26)
3.	Youthful	:	:	:	:	:	:	:	:Mature	(27)
4.	Easy	:	:	:	:	:	:	:	:Difficult	(28)
5.	Important	:	:	:	:	:	:	:	:Unimportant	(29)
6.	Boring	:	:	:	:	:	:	:	:Interesting	(30)
7.	Modern	:	:	:	:	:	:	:	:Old-fashioned	(31)
8.	Selfish	:	:	:	:	:	:	:	:Unselfish	(32)
9.	Useless	:	:	:	:	:	:	:	:Useful	(33)
10.	Honest	:	:	:	:	:	:	:	:Dishonest	(34)
11.	Something I will do	:	:	:	:	:	:	:	:Something I won't do	(35)

Questionnaire Six

Name one problem in your community that people should be concerned about. (36)

If you wanted to obtain information and assistance about the above problem, which people and organizations in your community would you talk or write to? Be as specific as possible--list names of people and organizations if you know them. List as many as you can.

1. 5. (37-38)

2. 6. (39-40)

3. 7.

4. 8.

85-A

QUESTIONNAIRE SEVEN

INSTRUCTIONS: PLEASE CHECK THE BOX THAT APPLIES TO YOU.

1. Male ☐ Female ☐ (41)

2. 7th grade ☐ (1)
   8th grade ☐ (2)
   9th grade ☐ (3)
   10th grade ☐ (4)
   11th grade ☐ (5)
   12th grade ☐ (6)
   (42)

3. White ☐
   Black ☐
   Asian American ☐
   Native American ☐
   Spanish Surname ☐
   (43)

4. Are you an--

(44)
(1) "A" student
(2) Between "A" and "B"
(3) "B" student
(4) Between "B" and "C"
(5) "C" student
(6) Between "C" and "D"
(7) "D" student
(8) Less than a "D" student

5. After high school, do you plan to enter: PLEASE CIRCLE ONE NUMBER ONLY.

(45)
1. The job market
2. Vocational school
3. College
4. Armed services
5. No plans yet
6. Other _____

6. In the long run, what occupation do you feel you will prefer? PLEASE CIRCLE ONE ONLY.

(46-47)
1. Trained technician or craftsman (beautician, draftsman)
2. Farm management, agriculture, farmer
3. Service (salesclerk, gas station attendant, waitress/waiter, etc.)
4. Business executive, owner, manager
5. Unskilled work
6. Secretary, clerical, office work
7. A professional life (doctor, nurse, lawyer, artist, engineer, teacher, etc.)
8. A life centering on home and family

(48=2) 9. Other _____

APPENDIX B

Pretest Booklet Two

BOOKLET TWO

EXPERIENTIAL EDUCATION QUESTIONNAIRE

Center for Youth Development & Research
University of Minnesota
St. Paul, Minnesota

GENERAL INSTRUCTIONS:

This is the second part of the Experiential Education Questionnaire. As explained in Booklet 1, we are trying to find out what students gain from action and service learning. Your ideas and responses are very important in learning about the value of these programs.

Two of the questionnaires in this booklet need special explanation. Questionnaire 1 asks your reaction to the kind of person or place you will be encountering in your action-learning experience. Your teacher will give you the word to which you will respond. Remind your teacher that you need the word before you can get started. (Even teachers can forget!!!!) In Questionnaire 2, you will explain how you would handle a series of situations. Please write as neatly and legibly as you can. It's very important that we be able to read your writing so that your answers can be scored correctly and we can use this information.

We sincerely appreciate the time and effort you have put into taking these questionnaires. Your ideas will help improve education in our high schools.

INSTRUCTIONS FOR SECRET CODE NUMBER:

Your responses will be held in strictest confidence. To make sure that no one knows who filled out this questionnaire and to be able to match your answers to another questionnaire you will take later, we want you to use the following secret code:

1) Write your birthdate in numbers in the space below. For example, if you were born on May 9, 1962, you would write: 0 5 / 0 9 / 6 2 (month / day / year)

__ __ / __ __ / __ __ (month / day / year) *(1-6)*

2) Write your initials in the boxes below:

First letter of your first name: ☐ *(7)*

First letter of your last name: ☐ *(8)*

3) Write the name of your school below: *(9-10)*

_____

4) Today's Date: __ __ / __ __ / __ __ (month / day / year) *(11-16)*

Pretest B

QUESTIONNAIRE ONE

INSTRUCTIONS:

The purpose of this questionnaire is to measure the meaning which an idea or a kind of person has for you by having you rate it by a series of descriptive words. Please make your judgments on the basis of what the kind of person or idea means to you. Do not worry or puzzle over individual terms. It is your first impressions, your immediate responses, that are wanted. On the other hand, please do not be careless, because we do want your true impressions.

Here is how you are to mark this questionnaire. There are seven positions between each pair of words. If you feel the kind of person or idea is very closely related to one end of the scale, place your check mark next to that word (e.g. Hot: X : : : : : :Cold. If you feel the idea or person is closely related to one end of the scale (but not extremely), place your check mark as follows: Hot: : X : : : : :Cold. If the idea or person seems only slightly related to one side as opposed to the other (but not really neutral) place your check mark as follows: Hot: : : X : : : :Cold.

	TERM							# OF TERM	(17-18)
1.	Kind	:	:	:	:	:	:	:	:Mean	(19)
2.	Worthless	:	:	:	:	:	:	:	:Valuable	(20)
3.	Passive	:	:	:	:	:	:	:	:Active	(21)
4.	Important	:	:	:	:	:	:	:	:Unimportant	(22)
5.	Weak	:	:	:	:	:	:	:	:Strong	(23)
6.	Smart	:	:	:	:	:	:	:	:Dumb	(24)
7.	Interesting	:	:	:	:	:	:	:	:Boring	(25)
8.	Bad	:	:	:	:	:	:	:	:Good	(26)
9.	Popular	:	:	:	:	:	:	:	:Unpopular	(27)
10.	Useless	:	:	:	:	:	:	:	:Useful	(28)
11.	Beautiful	:	:	:	:	:	:	:	:Ugly	(29)
12.	Sick	:	:	:	:	:	:	:	:Healthy	(30)
13.	Serious	:	:	:	:	:	:	:	:Humorous	(31)
14.	Slow	:	:	:	:	:	:	:	:Fast	(32)
15.	Competent	:	:	:	:	:	:	:	:Incompetent	(33)
16.	Sad	:	:	:	:	:	:	:	:Happy	(34)
17.	Sweet	:	:	:	:	:	:	:	:Sour	(35)
18.	Complicated	:	:	:	:	:	:	:	:Simple	(36)
19.	Lovable	:	:	:	:	:	:	:	:Repulsive	(37)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)		

ADULTS

		(1)	(2)	(3)	(4)	(5)	(6)	(7)		
1.	Friendly	:	:	:	:	:	:	:	:Unfriendly	(38)
2.	Powerless	:	:	:	:	:	:	:	:Powerful	(39)
3.	Complicated	:	:	:	:	:	:	:	:Simple	(40)
4.	Happy	:	:	:	:	:	:	:	:Sad	(41)
5.	Boring	:	:	:	:	:	:	:	:Interesting	(42)
6.	Confident	:	:	:	:	:	:	:	:Insecure	(43)
7.	Honest	:	:	:	:	:	:	:	:Dishonest	(44)
8.	Changing	:	:	:	:	:	:	:	:Settled	(45)
9.	Strong	:	:	:	:	:	:	:	:Weak	(46)
10.	Hopeful	:	:	:	:	:	:	:	:Hopeless	(47)
11.	Selfish	:	:	:	:	:	:	:	:Unselfish	(48)
12.	Successful	:	:	:	:	:	:	:	:Unsuccessful	(49)
13.	Unpleasant	:	:	:	:	:	:	:	:Pleasant	(50)
14.	Smart	:	:	:	:	:	:	:	:Dumb	(51)
15.	Unfair	:	:	:	:	:	:	:	:Fair	(52)
16.	Competent	:	:	:	:	:	:	:	:Incompetent	(53)
17.	Dangerous	:	:	:	:	:	:	:	:Safe	(54)
18.	Stubborn	:	:	:	:	:	:	:	:Flexible	(55)
19.	Kind	:	:	:	:	:	:	:	:Mean	(56)
20.	Serious	:	:	:	:	:	:	:	:Fun-loving	(57)
21.	Care too much	:	:	:	:	:	:	:	:Care too little	(58)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)		

BEING ACTIVE IN YOUR COMMUNITY

		(1)	(2)	(3)	(4)	(5)	(6)	(7)		
1.	Smart	:	:	:	:	:	:	:	:Dumb	(59)
2.	Unusual	:	:	:	:	:	:	:	:Usual	(60)
3.	Youthful	:	:	:	:	:	:	:	:Mature	(61)
4.	Easy	:	:	:	:	:	:	:	:Difficult	(62)
5.	Masculine	:	:	:	:	:	:	:	:Feminine	(63)
6.	Hopeful	:	:	:	:	:	:	:	:Hopeless	(64)
7.	Unpopular	:	:	:	:	:	:	:	:Popular	(65)
8.	Clean	:	:	:	:	:	:	:	:Dirty	(66)
9.	Important	:	:	:	:	:	:	:	:Unimportant	(67)
10.	Boring	:	:	:	:	:	:	:	:Interesting	(68)
11.	Strong	:	:	:	:	:	:	:	:Weak	(69)
12.	Safe	:	:	:	:	:	:	:	:Dangerous	(70)
13.	Practical	:	:	:	:	:	:	:	:Impractical	(71)
14.	Modern	:	:	:	:	:	:	:	:Old-fashioned	(72)
15.	Selfish	:	:	:	:	:	:	:	:Unselfish	(73)
16.	Pleasurable	:	:	:	:	:	:	:	:Unpleasurable	(74)
17.	Useless	:	:	:	:	:	:	:	:Useful	(75)
18.	Complicated	:	:	:	:	:	:	:	:Simple	(76)
19.	Honest	:	:	:	:	:	:	:	:Dishonest	(77)
20.	Something I will do	:	:	:	:	:	:	:	:Something I won't do	(78)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)		

79=3
80=0
repeat 1-10

89-A

INSTRUCTIONS:

Following are three actual incidents encountered by students in their action learning program. Read each incident carefully and project yourself into the setting as if it is a situation that you must deal with personally. As you read the story, think about what things you would do or say in the situation. Then answer the questions below:

* * *

1. YOU ARE WORKING IN A RECREATION PROGRAM FOR RETARDED TEENAGERS. YOU HELP SUPERVISE THEIR FRIDAY BOWLING "LEAGUE." YOU HELP THEM GET THE RIGHT SIZE SHOES, KEEP SCORE, REMIND PEOPLE WHEN IT'S THEIR TURN TO BOWL, AND HELP GUIDE THE BALL FOR THE SEVERELY HANDICAPPED STUDENTS. ONE OF THE RETARDED KIDS HAS BEEN ACTING PRETTY AFFECTIONATELY TOWARD YOU--TRIES TO HOLD YOUR HAND AND HUGS YOU. TOWARD THE END OF THE AFTERNOON, THE RETARDED STUDENT ASKS IF YOU WOULD LIKE TO GO ON A DATE NEXT FRIDAY NIGHT? YOU SAY YOU'RE BUSY, BUT THE STUDENT PERSISTS, SAYING, "HOW ABOUT THE NEXT FRIDAY, AND SO ON?" WHAT DO YOU DO OR SAY?

1. What's the first thing you would think of to do or say?

   a. (11-12)

(12)

2. What other things could you do or say--try to list as many as you can.

   b.

   c.

   d.

   e.

   f.

(13)

3. Look back at what you wrote in No. 1 and 2 and list the letter of the one you think is best _____ Please explain why you chose it.

(14)

4. Choose one you rejected and list the letter of the item _____ Please explain why you chose it.

(15)

5. Explain what you think is the "real" problem involved in or lying behind the incident.

(16)

6. Have you ever had to handle a problem like this before? ___ yes ___ no (17)

2. YOU ARE A VOLUNTEER AT A NURSING HOME. MRS. H. HAS BEEN IN THE NURSING HOME FOR THREE YEARS. SHE HAD A SMALL STROKE, AND WALKS WITH A CANE. SHE IS BASICALLY INDEPENDENT, BUT SHE SOMETIMES NEEDS HELP GETTING DRESSED AND UNDRESSED. SHE HAS THE IDEA THAT SHE'S GETTING AN APARTMENT SOON AND WILL LIVE THERE ALONE. NO ONE KNOWS WHERE SHE GOT THIS IDEA; HER DAUGHTERS KNOW NOTHING ABOUT IT, AND DON'T BELIEVE SHE IS CAPABLE OF LIVING ALONE (COOKING, HOUSEKEEPING, ETC.). MRS. H. IS MAKING DISHTOWELS AND DISHCLOTHS AND IS VERY INTENT ON MOVING. SHE SAYS TO YOU: "I'VE GOT TO HURRY UP AND FINISH HEMMING THESE TOWELS BECAUSE I'M MOVING OUT IN A FEW DAYS." WHAT DO YOU DO OR SAY?

1. What's the first thing you would think of to do or say?

   a.

2. What other things could you do or say--try to list as many as you can. (18)

   b.

   c.

   d.

   e.

   f.

3. Look back at what you wrote in No. 1 and 2 and list the letter of the one you think is best (19) ____. Please explain why you chose it.

4. Choose one you rejected and list the letter of the item (20) _____ Please explain why you chose it.

5. Explain what you think is the "real" problem involved in or lying behind the incident. (21)

6. Have you ever had to handle a problem like this before? (22)

   yes ___ no ___ (23)

3. YOU HAVE BEEN WORKING FOR SIX WEEKS IN THE COUNTY ATTORNEY'S OFFICE AS AN INTERN. AT THE BEGINNING OF THE SEMESTER, YOU, YOUR TEACHER, AND THE ASSISTANT COUNTY ATTORNEY AGREED THAT THE PURPOSE OF THE INTERNSHIP WAS FOR YOU TO LEARN FIRST-HAND ABOUT HOW THE LEGAL AND COURT SYSTEM OPERATES, TO LEARN ABOUT CAREERS IN THE FIELD OF LAW, AND TO WORK ON SPECIFIC PROJECTS AND TASKS THAT NEEDED TO BE DONE IN THE OFFICE. SINCE YOU BEGAN, YOU HAVE NOT BEEN GIVEN MANY SPECIFIC TASKS TO DO. YOU HAVE WATCHED SOME TRIALS, RUN ERRANDS, SAT IN WHILE THE ATTORNEY INTERVIEWED A PLAINTIFF, AND HAVE DONE A LOT OF FILING, BUT MOSTLY YOU'VE JUST HUNG AROUND. ALSO, THE ASSISTANT COUNTY ATTORNEY, WHO SUPERVISES YOU IS VERY BUSY. HE IS USUALLY JUST LEAVING FOR A LONG LUNCH WITH EVERYONE IN THE OFFICE BUT YOU WHEN YOU ARRIVE AT 11:30 A.M. AS YOU ARE RIDING THE BUS TO THE COURTHOUSE, YOU ARE WONDERING WHAT TO DO ABOUT THIS? WHAT WOULD YOU DO OR SAY?

1. What's the first thing you would think of to do or say?

   a.

2. What other things could you do or say--try to list as many as you can. (24)

   b.

   c.

   d.

   e.

   f.

3. Look back at what you wrote in No. 1 and 2 and list the letter of the one you think is best _____. Please explain why you chose it. (25)

4. Choose one you rejected and list the letter of the item _____ (26)
   Please explain why you chose it.

5. Explain what you think is the "real" problem involved in or lying behind the incident. (27)

6. Have you ever had to handle a problem like this before? (28)

   yes no (29) (30=4)

APPENDIX C

Posttest Booklet One

BOOKLET ONE

EXPERIENTIAL EDUCATION QUESTIONNAIRE

Center for Youth Development & Research
University of Minnesota
St. Paul, Minnesota

GENERAL INSTRUCTIONS:

We are asking your help once more in the national study of action and service learning programs. We would like to see whether your ideas and opinions have changed ove. the past few months. To do this, we are giving you questions that are very similar to those you answered several months ago.

Just as we told you last time, there are no right or wrong answers in the questionnaire. Your honest reactions are the "right" answers. Also, please ignore the numbers in parenthesis next to the answer blanks.

If you were in an action learning experience during this school term, answer all the Questionnaires in this booklet. If you were not, then skip the Questionnaire 6.

We sincerely appreciate your participation. Your ideas and responses will be very important in learning about the value of these programs!!

INSTRUCTION FOR SECRET CODE NUMBER:

Your responses will be held in strictest confidence. To make sure that no one knows who filled out this questionnaire and to be able to match your answers to another questionnaire you took previously, we want you to use the following secret code:

1) Write your birthdate in numbers in the space below. For example, if you were born on May 9, 1962, you would write: 0 5 / 0 9 / 6 2
month day year

__ / __ / __ (1-6)
month day year

2) Write your initials in the boxes below:

First letter of your first name: [ ] (7)

First letter of your last name: [ ] (8)

3) Write the name of your school below: ____ (9-10)

_____

4) Today's Date: __ / __ / __ (11-16)
month day year

Posttest

QUESTIONNAIRE ONE

INSTRUCTIONS

A. Look at the sample question below, but don't answer it until you have very carefully read the instructions below.

Almost Always True For Me	Some-times True For Me		Some-times True For Me	Almost Always True For Me
☐	☐	Some teenagers worry about school grades -BUT-	Other teenagers don't seem to worry about school grades.	☐ ☐

B. To answer these questions, there are two steps.

1) First, decide whether YOU are more like the teenagers on the left side who worry about school grades OR the teenagers on the right side who don't seem to worry about school grades. Don't mark anything down yet, but first decide which type of teenager is most like you and go to that side.

2) Second, now that you have decided which side is most like you, decide whether that is almost always true for you or sometimes true for you. If it's only sometimes true, then put an X in the box under sometimes true, if it's almost always true for you, then put an X in the box under almost always true.

C. Now continue to do the numbers below. For each number, you only check one box.

	ALMOST ALWAYS TRUE FOR ME	SOME-TIMES TRUE FOR ME		SOME-TIMES TRUE FOR ME	ALMOST ALWAYS TRUE FOR ME	
1.	☐	☐	Some teenagers feel bad when they let people down who depend on them -BUT-	Other teenagers don't let it bother them that much.	☐ ☐	(17)
2.	☐	☐	Some teenagers think it's the responsibility of the community to take care of people who can't take care of themselves -BUT-	Other teenagers think that everyone should just take care of themselves.	☐ ☐	(18)
3.	☐	☐	Some teenagers are interested in doing something about school problems -BUT-	Other teenagers don't really care that much about school problems.	☐ ☐	(19)
4.	☐	☐	Some teenagers let others do most of the work in a group -BUT-	Other teenagers help in a group all they can.	☐ ☐	(20)
5.	☐	☐	Some teenagers don't see a point in trying to change school policies with which they disagree because the adults control everything anyway -BUT-	Other teenagers think it's worthwhile trying to change things at school.	☐ ☐	(21)

	ALMOST ALWAYS TRUE FOR ME	SOME-TIMES TRUE FOR ME			SOME-TIMES TRUE FOR ME	ALMOST ALWAYS TRUE FOR ME	
6.	☐	☐	Some teenagers think it's some-body else's fault when things go wrong	-BUT-	Other teenagers think they themselves could be at fault when things go wrong.	☐	☐ (22)
7.	☐	☐	Some teenagers seem to find time to work on other people's problems	-BUT-	Other teenagers find taking care of their own problems more than enough to do.	☐	☐ (23)
8.	☐	☐	Some teenagers are interested in what other students in class have to say	-BUT-	Other teenagers don't care that much about what other students say.	☐	☐ (24)
9.	☐	☐	Some teenagers are interested in doing something about problems in the community	-BUT-	Other teenagers are not that interested in working on problems in the community.	☐	☐ (25)
10.	☐	☐	Some teenagers are the kind of people who spend a lot of time preparing for community assignments, job interviews, school assignments, etc.	-BUT-	Other teenagers don't think about it that much before going there.	☐	☐ (26)
11.	☐	☐	Some teenagers would rather not present ideas in a group discussion	-BUT-	Other teenagers feel comfortable in presenting ideas in a group discussion.	☐	☐ (27)
12.	☐	☐	Some teenagers almost always let others know when they can't keep an appointment	-BUT-	Other teenagers don't think it's that important to call ahead when they can't make it.	☐	☐ (28)
13.	☐	☐	Some teenagers think people should only help people they know--like close friends and relatives	-BUT-	Other teenagers think people should help people in general--whether they know them personally or not.	☐	☐ (29)
14.	☐	☐	For some teenagers, it seems too difficut to keep commitments	-BUT-	Other teenagers somehow manage to keep commitments.	☐	☐ (30)
15.	☐	☐	Some teenagers' ideas are almost always listened to in a group	-BUT-	Other teenagers have a hard time getting the group to pay attention to their suggestions.	☐	☐ (31)
16.	☐	☐	Some teenagers don't think they have much say about what happens to them	-BUT-	Other teenagers think they can pretty much control what will happen to their lives.	☐	☐ (32)

	ALMOST ALWAYS TRUE FOR ME	SOME-TIMES TRUE FOR ME			SOME-TIMES TRUE FOR ME	ALMOST ALWAYS TRUE FOR ME	
17.	☐	☐	Some teenagers don't think it makes much sense to help others unless you get paid for it	-BUT-	☐	☐	(33)
18.	☐	☐	Some teenagers are good at helping people	-BUT-	☐	☐	(34)
19.	☐	☐	Some teenagers don't ask a lot of questions in their job or community assignment because they figure the supervisor will tell them what they need to know	-BUT-	☐	☐	(35)
20.	☐	☐	Some teenagers feel obligated to carry out tasks assigned to them by the group	-BUT-	☐	☐	(36)
21.	☐	☐	Some teenagers think when good things happen it's because of something they did	-BUT-	☐	☐	(37)
22.	☐	☐	Some teenagers prefer to have someone clearly lay out their assignments	-BUT-	☐	☐	(38)
23.	☐	☐	Some teenagers aren't that worried about finishing jobs they promised they would do	-BUT-	☐	☐	(39)
24.	☐	☐	Some teenagers think they are able to help solve problems in the community	-BUT-	☐	☐	(40)

QUESTIONNAIRE TWO

INSTRUCTIONS:
Read the sentences below and mark an "X" in the box that best decribes you.

	very often	fairly often	some-times	once in a great while	practically never	
25. How often do you worry about whether other people like to be with you?	☐	☐	☐	☐	☐	(41)
26. How often do you feel sure of yourself among strangers?	☐	☐	☐	☐	☐	(42)

Please Continue on Next Page

	very often	fairly often	sometimes	once in a great while	practically never	
27. When you talk in front of a class or a group of people of your own age, how often are you pleased with your performance?	☐	☐	☐	☐	☐	(43)
28. How often do you feel self-conscious?	☐	☐	☐	☐	☐	(44)
29. How often do you feel that you have handled yourself well at a party?	☐	☐	☐	☐	☐	(45)
30. How often are you comfortable when starting a conversation with people whom you don't know?	☐	☐	☐	☐	☐	(46)
31. How often are you troubled with shyness?	☐	☐	☐	☐	☐	(47)
32. When you speak in a class dissussion, how often do you feel sure of yourself?	☐	☐	☐	☐	☐	(47)
33. When you have to talk in front of a class or a group of people of your own age, how often are you pleased with your performance?	☐	☐	☐	☐	☐	(49)
34. How often do you worry about how well you get along with other people?	☐	☐	☐	☐	☐	(50)

QUESTIONNAIRE THREE

	Strongly Agree	Agree	Disagree	Strongly Disagree	
35. I feel that I'm a person of worth, at least on an equal basis with others.	SA	A	D	SD	(51)
36. I feel that I have a number of good qualities.	SA	A	D	SD	(52)
37. All in all, I am inclined to feel that I am a failure.	SA	A	D	SD	(53)
38. I am able to do things as well as most other people. .	SA	A	D	SD	(54)
39. I feel I do not have much to be proud of..	SA	A	D	SD	(55)
40. I take a positive attitude toward myself.	SA	A	D	SD	(56)
41. On the whole, I am satisfied with myself.	SA	A	D	SD	(57)
42. I wish I could have more respect for myself.	SA	A	D	SD	(58)
43. I certainly feel useless at times.	SA	A	D	SD	(59)
44. At times, I think I am no good at all.	SA	A	D	SD	(60)

QUESTIONNAIRE FOUR

INSTRUCTIONS:

This questionnaire asks you to think of a job or career field that you might like to enter after completing your education and to answer some questions in relation to that career field or job. For the statements listed below please indicate on a scale of 1 (never) to 5 (frequently) how often you have had each experience during the past twelve months. Most students have had some but not all of these experiences. Therefore, if you have not had that experience mark the answer sheet as 1 for never. If you have had the experience--select 2 if you have done it only once, 3 if you did it several times during the year, 4 if you did it about once a month and 5 if you did it more frequently than once a month.

IN RELATION TO A JOB OR CAREER FIELD YOU MIGHT LIKE TO ENTER, HOW FREQUENTLY DURING THE PAST 12 MONTHS HAVE YOU:

		Never	Once	Several Times	About Once a month	More Than Once A Month	
45.	Talked about the job or career field with relatives or friends.	1	2	3	4	5	(61)
46.	Talked about the job or career field with persons employed in that career field.	1	2	3	4	5	(62)
47.	Talked about the job or career field with teachers, counselors, or program staff.	1	2	3	4	5	(63)
48.	Read materials about the job or career field.	1	2	3	4	5	(64)
49.	Observed activities related to the job or career filed.	1	2	3	4	5	(65)
50.	Tried out activities related to the job or career field.	1	2	3	4	5	(66)
51.	Worked in this job or career field.	1	2	3	4	5	(67)
52.	Thought about racial, sex or other biases that may exist related to the job or career field.	1	2	3	4	5	(68)
53.	Thought about the steps necessary to prepare for the job or career field.	1	2	3	4	5	(69)
54.	Learned the range of pay for the job or career field.	1	2	3	4	5	(70)
55.	Learned the level of schooling or type of training generally required to enter the job or career field.	1	2	3	4	5	(71)
56.	Thought about the relevance of your current junior or senior high school program to the job or career field.	1	2	3	4	5	(72)
57.	Learned the employment demand for people in this job or career field.	1	2	3	4	5	(73)

		Never	Once	Several Times	About Once a Month	More Than Once a Month	
58.	Learned the chances for advancement or promotion for people in this job or career field.	1	2	3	4	5	(74)
59.	Thought about the influence the job or career field would have on your lifestyle (for example, your leisure time activities, friends, family life, amount of free time).	1	2	3	4	5	(75)
60.	Thought about how well the job or career field matches your interests and abilities.	1	2	3	4	5	(76)

(77)=5
card 6
repeat 1-10

QUESTIONNAIRE FIVE

Name one problem in your community that you have become aware of recently. (11)

If you wanted to obtain information and assistance about the above problem, which people and organizations in your community would you talk or write to? Be as specific as possible--list names of people and organizations if you know them. List as many as you can.

1. 5. (12-13)
2. 6.
3. 7. (14-15)
4. 8.

Have you ever been in an action-learning program before? (16)

__No __Yes (circle number of times) 1 2 3 4 5

IF YOU ARE OR WERE IN AN ACTION LEARNING PROGRAM THIS SCHOOL TERM, PLEASE ANSWER QUESTIONNAIRE 6. IF YOU WERE NOT, PLEASE SKIP QUESTIONNAIRE 6 AND HAND THIS IN TO YOUR TEACHER.

(17)

QUESTIONNAIRE SIX

INSTRUCTIONS: Please choose the answer that best describes your experience in your action learning program. If you were in a program that had several major purposes, you may want to agree with more than one of the statements below. Circle appropriate response.

		Strongly Agree	Agree	Disagree	Strongly Disagree	
1.	A major purpose of the program was to explore careers.	SA	A	D	SD	(18)
2.	A major purpose of the program was to help people in the community.	SA	A	D	SD	(19)
3.	A major purpose of the program was to have a wilderness/ outdoor experience.	SA	A	D	SD	(20)
4.	A major purpose of the program was to gather first-hand information about community issues, problems, concerns.	SA	A	D	SD	(21)

OVER

5. If you compared your action learning experience to an average class that you've taken in your school, did you learn

__Much less? __Less? __About the same? __More? __Much more? *(22)*

6. Was there a time set aside to talk with a teacher about field placement?

__never __once during the whole time __a few times __once a week *(23)*

7. Was there a time set aside (a class or seminar) when you talked with other students who were in a field placement?

__never __once during the whole time __a few times __once a week *(24)*

8. How many weeks did your field placement last? __ *(25 & 26)*

9. How many days a week did you go to your field placement? *(27)*

__1 __2 __3 __4 __5 or more

10. Did you develop a really good personal relationship with someone during the program?

(1) Yes ( ) If you answer yes, please answer the rest of the questions below. *(28)*

(2) No ( ) If you answer no, skip the rest of the questions below.

11. Who was the person? Check the box that applies to this person. *(29)*

( ) supervisor
( ) another adult working at the site
( ) teacher
( ) other, please specify _____

Now, please answer the following questions about your relationship with the person you identified in question 86. Circle the letter that best describes how much you agree or disagree with the statement.

	Strongly Agree	Agree	Dis-agree	Strongly Disagree	
12. We liked each other	SA	A	D	SD	*(30)*
13. That person and I talked about things besides work, like sports, hobbies, personal things	SA	A	D	SD	*(31)*
14. That person respected and trusted me	SA	A	D	SD	*(32)*
15. That person and I talked about my future plans	SA	A	D	SD	*(33)*
16. That person and I talked about what was happening at the site	SA	A	D	SD	*(34)*

35=6

APPENDIX D

Posttest Booklet Two

BOOKLET TWO

EXPERIENTIAL EDUCATION QUESTIONNAIRE

Center for Youth Development & Research
University of Minnesota
St. Paul, Minnesota

GENERAL INSTRUCTIONS:

This is the second part of the Experiential Education Questionnaire and the last booklet you will have to fill out in this study!!

In Questionnaire 1, your teacher will give the word to which you will respond--the same word you used several months ago. In Questionnaire 2, please write as neatly and as legibly as you can. It is very important that you answer all the questions in all three of the situations in Questionnaire 2.

If you were in an action learning experience during this school term, answer all the questions in this booklet. If you were not, then complete only Questionnaire 1 and 2.

THANK YOU VERY MUCH!!!!

INSTRUCTIONS FOR SECRET CODE NUMBER:

Your responses will be held in strictest confidence. To make sure that no one knows who filled out this questionnaire and to be able to match your answers to another questionnaire you took previously, we want you to use the following secret code:

1) Write your birthdate in numbers in the space below. For example, if you were born on May 9, 1962, you would write: 0 5 / 0 9 / 6 2
month day year

__ / __ / __ *(1-6)*
month day year

2) Write your initials in the boxes below:

First letter of your first name: ☐ *(7)*

First letter of your last name: ☐ *(8)*

3) Write the name of your school below: *(9-10)*

_____

4) Today's Date: __ / __ / __ *(11-16)*
month day year

Posttest A

QUESTIONNAIRE ONE

INSTRUCTIONS:

The purpose of this questionnaire is to measure the meaning which an idea or a kind of person has for you by having you rate it by a series of descriptive words. Please make your judgments on the basis of what the kind of person or idea means to you. Do not worry or puzzle over individual terms. It is your first impressions, your immediate responses, that are wanted. On the other hand, please do not be careless, because we do want your true impressions.

Here is how you are to mark this questionnaire. There are seven positions between each pair of words. If you feel the kind of person or idea is very closely related to one end of the scale, place your check mark next to that word (e.g. Hot: X : : : : : :Cold. If you feel the idea or person is closely related to one end of the scale (but not extremely), place your check mark as follows: Hot: : X : : : : :Cold. If the idea or person seems only slightly related to one side as opposed to the other (but not really neutral) place your check mark as follows: Hot: : : X : : : :Cold.

	TERM							# OF TERM	(17-18)
1.	Kind	:	:	:	:	:	:	:Mean	(19)
2.	Worthless	:	:	:	:	:	:	:Valuable	(20)
3.	Passive	:	:	:	:	:	:	:Active	(21)
4.	Important	:	:	:	:	:	:	:Unimportant	(22)
5.	Weak	:	:	:	:	:	:	:Strong	(23)
6.	Smart	:	:	:	:	:	:	:Dumb	(24)
7.	Interesting	:	:	:	:	:	:	:Boring	(25)
8.	Bad	:	:	:	:	:	:	:Good	(26)
9.	Popular	:	:	:	:	:	:	:Unpopular	(27)
10.	Useless	:	:	:	:	:	:	:Useful	(28)
11.	Beautiful	:	:	:	:	:	:	:Ugly	(29)
12.	Sick	:	:	:	:	:	:	:Healthy	(30)
13.	Serious	:	:	:	:	:	:	:Humorous	(31)
14.	Slow	:	:	:	:	:	:	:Fast	(32)
15.	Competent	:	:	:	:	:	:	:Incompetent	(33)
16.	Sad	:	:	:	:	:	:	:Happy	(34)
17.	Sweet	:	:	:	:	:	:	:Sour	(35)
18.	Complicated	:	:	:	:	:	:	:Simple	(36)
19.	Lovable	:	:	:	:	:	:	:Repulsive	(37)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	

ADULTS

		(1)	(2)	(3)	(4)	(5)	(6)	(7)		
1.	Friendly	:	:	:	:	:	:	:	:Unfriendly	(38)
2.	Powerless	:	:	:	:	:	:	:	:Powerful	(39)
3.	Complicated	:	:	:	:	:	:	:	:Simple	(40)
4.	Happy	:	:	:	:	:	:	:	:Sad	(41)
5.	Boring	:	:	:	:	:	:	:	:Interesting	(42)
6.	Confident	:	:	:	:	:	:	:	:Insecure	(43)
7.	Honest	:	:	:	:	:	:	:	:Dishonest	(44)
8.	Changing	:	:	:	:	:	:	:	:Settled	(45)
9.	Strong	:	:	:	:	:	:	:	:Weak	(46)
10.	Hopeful	:	:	:	:	:	:	:	:Hopeless	(47)
11.	Selfish	:	:	:	:	:	:	:	:Unselfish	(48)
12.	Successful	:	:	:	:	:	:	:	:Unsuccessful	(49)
13.	Unpleasant	:	:	:	:	:	:	:	:Pleasant	(50)
14.	Smart	:	:	:	:	:	:	:	:Dumb	(51)
15.	Unfair	:	:	:	:	:	:	:	:Fair	(52)
16.	Competent	:	:	:	:	:	:	:	:Incompetent	(53)
17.	Dangerous	:	:	:	:	:	:	:	:Safe	(54)
18.	Stubborn	:	:	:	:	:	:	:	:Flexible	(55)
19.	Kind	:	:	:	:	:	:	:	:Mean	(56)
20.	Serious	:	:	:	:	:	:	:	:Fun-loving	(57)
21.	Care too much:	:	:	:	:	:	:	:	:Care too little	(58)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)		

BEING ACTIVE IN YOUR COMMUNITY

		(1)	(2)	(3)	(4)	(5)	(6)	(7)		
1.	Smart	:	:	:	:	:	:	:	:Dumb	(59)
2.	Unusual	:	:	:	:	:	:	:	:Usual	(60)
3.	Youthful	:	:	:	:	:	:	:	:Mature	(61)
4.	Easy	:	:	:	:	:	:	:	:Difficult	(62)
5.	Masculine	:	:	:	:	:	:	:	:Feminine	(63)
6.	Hopeful	:	:	:	:	:	:	:	:Hopeless	(64)
7.	Unpopular	:	:	:	:	:	:	:	:Popular	(65)
8.	Clean	:	:	:	:	:	:	:	:Dirty	(66)
9.	Important	:	:	:	:	:	:	:	:Unimportant	(67)
10.	Boring	:	:	:	:	:	:	:	:Interesting	(68)
11.	Strong	:	:	:	:	:	:	:	:Weak	(69)
12.	Safe	:	:	:	:	:	:	:	:Dangerous	(70)
13.	Practical	:	:	:	:	:	:	:	:Impractical	(71)
14.	Modern	:	:	:	:	:	:	:	:Old-fashioned	(72)
15.	Selfish	:	:	:	:	:	:	:	:Unselfish	(73)
16.	Pleasurable	:	:	:	:	:	:	:	:Unpleasurable	(74)
17.	Useless	:	:	:	:	:	:	:	:Useful	(75)
18.	Complicated	:	:	:	:	:	:	:	:Simple	(76)
19.	Honest	:	:	:	:	:	:	:	:Dishonest	(77)
20.	Something I will do	:	:	:	:	:	:	:	:Something I won't do	(78)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)		

79=7
80=0
repeat 1-10

INSTRUCTIONS:

Following are three actual incidents encountered by students in their action learning program. Read each incident carefully and project yourself into the setting as if it is a situation that you must deal with personally. As you read the story, think about what things you would do or say in the situation. Then answer the questions below:

* * *

1. YOU ARE WORKING AT A NURSING HOME. YOU'VE COME TO BE REALLY GOOD FRIENDS WITH ONE LONELY OLD MAN THERE AND YOU VISIT HIM EVERY TIME YOU COME. ONE DAY HE TELLS YOU THE ONLY THING HE REALLY HATES ABOUT THE NURSING HOME IS THAT THE STAFF WON'T LET HIM HAVE A DRINK. HE HANDS YOU A COUPLE OF BUCKS AND ASKS YOU TO SNEAK A PINT OF BRANDY TO HIM THE NEXT TIME YOU COME. YOU SAY YOU CAN'T GET ANY BECAUSE YOU'RE UNDER AGE, BUT HE BEGS YOU. WHAT DO YOU DO OR SAY?

1. What's the first thing you would think of to do or say?

   a. (11-11)

2. What other things could you do or say--try to list as many as you can. (12)

   b.

   c.

   d.

   e.

   f.

3. Look back at what you wrote in No. 1 and 2 and list the letter of the one you think is best ____. Please explain why you chose it. (13)

4. Choose one you rejected and list the letter of the item ____ Please explain why you chose it. (14)

5. Explain what you think is the "real" problem involved in or lying behind the incident. (15)

6. Have you ever had to handle a problem like this before? ____ yes ____ no (16) (17)

2. THERE IS A BOY IN YOUR ELEMENTARY CLASS NAMED JERRY WHO IS REALLY SMART IN MATH AND SCIENCE, BUT CAN HARDLY READ AND DOESN'T WRITE WELL EITHER. BESIDES THAT, HE IS ALWAYS DIRTY AND MESSY (LOOKS AS IF HE HAS NEVER COMBED HIS HAIR). HE HANGS AROUND YOU AND THE TEACHER A LOT. NONE OF THE OTHER KIDS LIKE HIM, DON'T LIKE HIM TO PLAY WITH THEM, AND TEASE HIM A LOT AND GANG UP ON HIM. TODAY YOU WALK IN THE ROOM AND SOME OF THE KIDS ARE AGAIN TEASING HIM. WHAT DO YOU DO OR SAY?

1. What's the first thing you would think of to do or say?

   a.

(18)

2. What other things could you do or say--try to list as many as you can.

   b.

   c.

   d.

   e.

   f.

(19)

3. Look back at what you wrote in No. 1 and 2 and list the letter of the one you think is best. _____ Explain why you chose it.

(20)

4. Choose one you rejected and list the letter of the item. _____ Please explain why you chose it.

(21)

5. Explain what you think is the "real" problem involved in or lying behind the incident.

(22)

6. Have you ever had to handle a problem like this before? ___ yes ___ no (23)

3. YOU ARE WORKING IN A CENTER FOR RETARDED CHILDREN AND TEENAGERS. YOU JUST LOVE BEING THERE AND THE KIDS REALLY LOOK FORWARD TO SEEING YOU. BUT YOU REALLY ARE BOTHERED BY ONE OF THE CENTER'S POLICIES WHICH IS TO PUT UNRULY OR MISBEHAVING KIDS IN THE QUIET ROOM. THIS IS A SMALL AND DIMLY LIT CLOSET. THE IDEA IS TO CALM THE KID DOWN, BUT YOU THINK IT IS PRETTY CRUEL. TODAY A KID HAS BEEN ACTING UP AND YOU ARE TOLD BY YOUR SUPERVISOR TO PUT HIM IN THE QUIET ROOM. WHAT DO YOU DO OR SAY?

1. What's the first thing you think of to do or say?

   a.

(24)

2. What other things could you do or say--try to list as many as you can.

   b.

   c.

   d.

   e.

   f.

(25)

3. Look back at what you wrote in No. 1 and 2 and list the letter of the one you think is best. _____ Explain why you chose it.

(26)

4. Choose one you rejected and list the letter of the item. _____ Please explain why you chose it.

(27)

5. Explain what you think is the "real" problem involved in or lying behind the incident.

(28)

6. Have you ever had to handle a problem like this before? ___ yes ___ no (29)

OVER

IF YOU ARE OR WERE IN AN ACTION LEARNING PROGRAM THIS SCHOOL TERM, PLEASE ANSWER QUESTIONNAIRE 3. IF YOU WERE NOT, PLEASE SKIP QUESTIONNAIRE 3 AND HAND THIS IN TO YOUR TEACHER.

Questionnaire Three

1. What is your overall rating of this program as a learning experience?

   Excellent ☐ (1) Good ☐ (2) Poor ☐ (3) Terrible ☐ (4) 30

2. If you had an excellent or good learning experience, what made it good or excellent?

3. If you had a poor or terrible learning experience, what made it poor or terrible?

31

32

33

34

35

INSTRUCTIONS: The following list describes some features of a community field experience. Please describe your particular experience by circling the appropriate number from 1 to 5.

	Practically Never	Once in a Great While	Sometimes	Fairly Often	Very Often	
4. Had adult responsibilities	1	2	3	4	5	(36)
5. Had challenging tasks	1	2	3	4	5	(37)
6. Made important decisions	1	2	3	4	5	(38)
7. Discussed my experiences with teachers	1	2	3	4	5	(39)
8. My ideas were ignored	1	2	3	4	5	(40)
9. What I did was interesting	1	2	3	4	5	(41)
10. Did things myself instead of observing	1	2	3	4	5	(42)
11. Given enough training to do my tasks	1	2	3	4	5	(43)
12. I was given clear directions	1	2	3	4	5	(44)
13. Had freedom to develop and use my own ideas	1	2	3	4	5	(45)
14. Discussed my experiences with my family and friends	1	2	3	4	5	(46)
15. Adults at site took personal interest in me	1	2	3	4	5	(47)
16. Had freedom to explore my own interests	1	2	3	4	5	(48)
17. Had variety of tasks to do at the site	1	2	3	4	5	(49)
18. I never got help when I needed it	1	2	3	4	5	(50)
19. Was appreciated when I did a good job	1	2	3	4	5	(51)
20. Adults criticized me or my work	1	2	3	4	5	(52)
21. Felt I made a contribution	1	2	3	4	5	(53)
22. Applied things I've learned in school to my community placement	1	2	3	4	5	(54)
23. Applied things I've learned in my community placement to school	1	2	3	4	5	(55)

56=8

APPENDIX E

Supervisor Survey

111

SUPERVISOR SURVEY

Name of Student _____

Supervisor's Name _____

Agency _____

Student's Task _____

INSTRUCTION FOR CODE NUMBER: (Ask student to fill this out)

1. Write your birthdate in numbers in the space below. (1-6)

   __ / __ / __
   month day year

2. Write your initials in the boxes below:

   First letter of your first name: ☐ (7)

   First letter of your last name: ☐ (8)

3. Write the name of your school below: (9-10)

   _____

4. Today's Date: (11-16)

   __ / __ / __
   month day year

2. The overall opinion of the work done by student:

   Excellent___ Very Good___ Satisfactory___ Poor___ Unsatisfactory___ (17)

For each of the qualities below, mark a point on the scale which coincides with your estimate of the student's ability or performance. There are seven positions on the scale with the final one "N", indicating no opportunity to observe the student on that quality.

3. DEPENDABILITY (18)

Can always count on student		Usually Dependable		Irresponsible		N

4. COOPERATION (19)

Works very well with staff &/or supervisor		Works satisfactorily with others		Uncooperative		N

5. WILLINGNESS TO LEARN & IMPROVE (20)

Readily seeks or accepts help when appropriate		Accepts help somewhat grudgingly		Ignores needed help or is overly dependent upon help		N

6. SKILL IN COMMUNICATING WITH STAFF & OTHERS (21)

Outstanding ability to relate to others listens carefully & speaks clearly		Willingness to try to relate listens & speaks satisfactorily		Unable or unwilling to try to relate doesn't listen, speaks incoherently		N

7. PROBLEM SOLVING (22)

Imaginative, resourceful in recognizing &		Satisfactory		Confused, haphazard in attacking problems		N

6. SKILL IN COMMUNICATING WITH STAFF & OTHERS

Outstanding ability to relate to others listens carefully & speaks clearly	Willingness to try to relate listens & speaks satisfactorily	Unable or unwilling to try to relate doesn't listen, speaks incoherently	N	(21)

7. PROBLEM SOLVING

Imaginative, resourceful in recognizing & solving problems	Satisfactory	Confused, haphazard in attacking problems	N	(22)

8. UNDERSTANDING OF PEOPLE

Clear insights into personal/social problems of people	Some awareness	Indiffarent or unaware	N	(23)

9. SELF-MOTIVATION

Is able to function alone & does not need to be told what to do	Satisfactory	Needs constant supervision, cannot work independently	N	(24)

10. PERSEVERANCE

Perseveres in difficult, even routine tasks	Works well at jobs that interest him	Quits at first obstacle	N	(25)

11. CHALLENGE

Enthusiastically seeks out difficult challenging tasks	Prefers safer, less threatening tasks	Unable or unwilling to do difficult tasks	N	(26)

12. SELF UNDERSTANDING

Has accurate sense of own abilities & interests	Accurate in some areas	Inaccurate sense of abilities--exaggerates or underestimates	N	(27)

13. CURIOSITY

Always finds something interesting to do, look at, ask about	Interested in things pointed out to him	Shows no interest in tasks, people or surroundings	N	(28)

14. PERFORMANCE

Goes beyond expectations	Does a good job on assigned tasks	Does less than is asked or able to do	N	(29)

COMMENTS: (Please use back)

APPENDIX F

Parent Survey

PARENT SURVEY

Name of Student _____

INSTRUCTION FOR CODE NUMBER: (Ask student to fill this out)

1. Write birthdate in numbers in the space below.

   month__ / __day__ / __year (1-6)

2. Write initials in the boxes below:
   First letter of first name: [ ] (7)
   First letter of last name: [ ] (8)
3. Write the name of school below: (9-10)

   _____

4. Today's Date: (11-16)

   month__ / __day__ / __year

Your son or daughter has been participating in an Action Learning program at our school. Action Learning is based on the notion that people learn some things best by doing them, and features having students involved in direct experiences in the community (tutoring, assisting elderly or handicapped persons, interning with business persons, doing community projects, etc.). It also encourages serious reflection on that experience. We are most interested in your opinion on the value of your child's Action Learning experience and would appreciate your taking the time to answer the following questions. Thank you for your interest and concern.

1. What did your child do for his/her Action Learning experience? _____ (17)

   _____

2. How much has your son or daughter talked, at home, about what they do in the program? (18)

   a good deal ____ some ____ very little

3. How does this compare with how much they talk about other school classes? (19)

   more ____ about the same ____ less

Following is a list of things which some people feel might be gained through Action Learning. Read each item and indicate whether you think your child's Action Learning program has helped him/her in that area. Circle the appropriate letter(s).

THE ACTIVITIES IN THIS PROGRAM SEEM TO HAVE HELPED MY CHILD LEARN	Strongly Agree	Agree	Dis-Agree	Strongly Disagree	Don't Know	
4. Realistic attitudes toward other people (such as the kind he/she has been working with) . .	SA	A	D	SD	DK	(20)
5. Knowledge of the community	SA	A	D	SD	DK	(21)
6. A sense of usefulness in relation to the community	SA	A	D	SD	DK	(22)
7. Knowledge about possible careers.	SA	A	D	SD	DK	(23)
8. Realistic ideas about the world of work . . .	SA	A	D	SD	DK	(24)
9. To assume new, important tasks in community and school.	SA	A	D	SD	DK	(25)
10. To accept consequences of own actions	SA	A	D	SD	DK	(26)
11. Deeper concern for fellow human beings. . . .	SA	A	D	SD	DK	(27)
12. Increased problem-solving ability	SA	A	D	SD	DK	(28)
13. Increased self-motivation to learn, participate, achieve	SA	A	D	SD	DK	(29)
14. To be more assertive and independent.	SA	A	D	SD	DK	(30)

14. To be more assertive and independent. . . . . SA A D SD DK (30)

15. To be more open to new experiences. . . . . SA A D SD DK (31)

16. A stronger self-concept (sense of confidence, sense of competence, self-awareness) . . . . . SA A D SD DK (32)

17. Communication skills (listening, speaking, presenting ideas through variety of media) . . . SA A D SD DK (33)

18. Gathering and analyzing information, observation, reflecting on experience. . . . . SA A D SD DK (34)

19. How much knowledge do you think he/she gained compared to other classes . . . . . (35)

much more | more | about the same | less | much less

20. How effective do you think Action Learning is as an educational method? (36)

very effective and useful | somewhat useful | not at all useful

21. Would you recommend that the school continue this program? (37)

very definitely yes | yes | not sure | no | absolutely no

22. Other comments: (Please use back) (38)

APPENDIX G

Crites Vocational Maturity Test

APPENDIX H

Jobs I Know In The Health Field

JOBS I KNOW IN THE HEALTH FIELD

There are many different types of jobs in the medical and mental health field. On the lines below write down as many jobs as you can in the medical or mental health field. You don't need to include any jobs that you already listed before. Thank you.

APPENDIX I

Jobs Possible For Me To Fill

JOBS POSSIBLE FOR ME TO FILL

There are many different jobs that adults might do. But not everyone can fill every job. Some people just aren't right for some jobs. What we'd like you to do is to write down as many job names as you can in the space below that are possible for you to fill after you are finished with your schooling.